An Exploratory Study of the Presence and Direction of Agenda-Setting Effects between Leading U.S. Foreign Policy Think Tanks and U.S. Newspapers

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Abstract

This dissertation explores the roles news media and think tanks play in U.S. foreign policy in an analysis of their possible effects on each other's agendas. In an analysis of salience of, or attention to, multiple countries over time in coverage from leading U.S. newspapers, *The New York Times* and *Washington Post*, and in published online materials from leading U.S. foreign policy think tanks, *Brookings Institution* and *Carnegie Endowment for International Peace*, the research looks at the presence, direction, and strength of agenda-setting effects in the construction of news agendas and attention foci of think tanks. Findings suggest that the relationship between news agenda and agendas of the think tanks is situational, strong when present, highly reciprocal in some cases and unidirectional (either from think tanks to news media content or the other way around) in others. The connection between the agendas of think tanks and the news agenda, as well as the possible impact of think tanks on news media attention to countries, suggest that think tanks should be included in foreign policy agenda-setting models, traditionally limited to policymakers (president and congress), public, and media as active participants. The ability of news media to affect the attention foci of think tanks necessitates consideration of their content in investigating the impact of think tanks.

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Chapter 1.
Introduction

Thousands of think tanks have emerged over the past few decades on national and international political stages, in both developed and developing democracies. By some estimates, there are more than 6,600 think tanks worldwide, and nearly 2,000 are in the U.S. (McGann, 2015, p. 53). As the numbers of think tanks have been increasing, arguably so have their significance and influence (Abelson, 1996; Dickson, 1971; McGann, 2005; Sanders, 2009; Weidenbaum, 2009). Still relatively new players in the political arena[1], think tanks manage to drive economic and political change worldwide, according to the think tanks themselves and researchers who are not necessarily associated with them. Their role of "catalysts of political and economic reform" (McGann, 2010b, p. 3) appears especially significant in developing and transitional regimes - those moving from authoritarianism to democracy.

In these countries, alongside on-site organizations, U.S.-based think tanks catalyze reforms and drive democratic changes, as they "reinforce and encourage the western-preferred image of democracy" (Scott, 1999, p. 148). They do so through engaging directly with foreign governments and NGOs[2] and through "strengthening the advocacy tools of local and

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[1] Though some authors, including one of more prominent think tanks scholars, Donald Abelson (1966), push the birth date of think tanks beyond the 19th century, RAND Corporation, formed during World War II, is often regarded as the first think tank in the modern understanding of the term (Smith, 1971). Later parts of the past century have seen the emergence of the majority of think tanks: More than 90% of U.S. and European think tanks were created since 1951; over a third of all think tanks in these two regions were created in a relatively recent period between 1981 and 1990; since 1980, the number of think tanks in the United States more than doubled (McGann, 2015, p. 10).

[2] For example, Carnegie Endowment for International Peace, one of the top foreign policy think tanks in the United States, established 'Moscow Center for Russian and Eurasian Programmes,' which draws "participants from across the Russian and foreign political spectrum and from Moscow's media and diplomatic communities" (Carnegie Endowment for International Peace, n.d.-b). Carnegie Endowment also maintains offices in in Beijing, Beirut, and Brussels.

transnational activists" by means of accumulating and disseminating knowledge (Scott, 1999, p. 155). Think tanks bridge the gap between governments, NGOs, and experts by organizing and facilitating conferences, seminars, and other networking opportunities[3]. Some of their impacts on global democratization and political transformations in the world are not as straightforward, and their influence is not always direct.

One such mediated influence channel for think tanks is their impact on the U.S. foreign policy. While empirical research illustrates "moderate but consistent worldwide effect of U.S. democracy promotion" (Finkel, Pérez-Liñán, & Seligson, 2007, p. 436), the only remaining super power (Wiarda, 2009) and an active promoter of democracy (Meernik, 1996), the United States of America is headquarters to more think tanks than any place in the world. The U.S. is the cradle of think tank development (Abelson, 1996, 2009; Dickson, 1971; Rich, 2004; J. A. Smith, 1991; P. I. S. Smith, 1971) and their current haven. Organizations based in the U.S. dominate ratings[4], which, among other criteria, account for the impact a think tank's research has had on policy[5].

American think tanks, compared with their international counterparts, appear to have more significance in the world of politics and "play a major part in the formulation and

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[3] As an illustration, Brookings Institution, another leading American foreign policy think tank, in cooperation with Stockholm Institute of Transition Economics (SITE), started The Global Institute, an initiative set to "highest standard for research and policy analysis" in developing countries (Brookings Institution, n.d.-c). Member-organizations of the institute held a series of conferences in Moscow and Beijing, which brought together academics, representatives of governments. and international organizations, and "fostered more and deeper dialogue among thinkers and leaders." (Brookings Institution)

4 As an example, in the University of Pennsylvania's Global Go to Think Tanks Index Report, among the top 10 think tanks worldwide (McGann, 2015, p. 65) and the in top-ten foreign policy and international affairs think tanks (McGann, 2015, p. 98), six organizations, the majority in both cases, were based in the United States. Seven out of top 10 international development think tanks are (McGann, 2015, p. 102) are U.S.-based as well.

5 The rating system developed for the above Report, in order to assess this impact, looks at "Policy recommendations considered or actually adopted by policymakers, civil society or policy actors" (McGann, 2015, p. 50).

implementation of the U.S. foreign policy. Research shows (Jacobs & Page, 2005) that, among other outside influences[6], only internationally oriented business leaders have a more pronounced footprint on the U.S. foreign policy than do policy experts. Wiarda (2008) argues that, among trained experts and groups of experts, think tanks (by steering clear from general abstract models, being aware of bureaucratic aspect of policymaking, and by keeping tabs on current concerns among policymakers) have significantly more influence on American politics than do their academic counterparts. Despite the fact that "little progress has been made in evaluating the nature and extent of their [think tanks] contribution to public policy" (Abelson, 2006, p. 163), and that "…it is impossible to assign a numerical value to the amount of influence think tanks wield" (Abelson, 2009, p. 170), academic literature admits that "…an elite group of think tanks continue to make their presence felt…" (Abelson, 2009, p. 176). As a policymaker puts it, "of the many influences on U.S. foreign policy formulation, the role of think tanks is among the most important and least appreciated" (Haass, 2002, p. 5). According to Richard Haass (2002), a former Director of Policy and Planning U.S. Department of State, thinks tanks offer a number of vital benefits, including generating news ideas for government, supplying trained experts for Congress and administration, providing a new venue for policymakers to "build shared understanding on policy options" (Haass, 2002, p. 7), mediating party conflicts, and educating and engaging public.

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[6] The research included a survey of foreign policy issue positions among policymakers, foreign policy experts, business leaders, labor leaders, and general public. Besides think tanks, or "special foreign policy organizations," the experts group also included educators and "private foreign policy groups" (Jacobs & Page, 2005, p. 110). News media and other mass media representatives were excluded from the analysis, as well as minority, religious, and special interest groups' leaders as not relevant within the theoretical approach of the mentioned research.

Dubbed the “powerhouses” of U.S. politics, think tanks assumed a “major role” in the “kaleidoscope of influences that is our [U.S.] foreign policy” (Wiarda, 2008, p. 117). However, what that major role is exactly and how independent the influence of think tanks is from other pieces in the foreign policy kaleidoscope, remains unknown[7] A kaleidoscope’s mirrors and colored glass create an illusion of a whole image. Knowing which colors of influence in foreign policy think tanks create and which ones they merely reflect is of great significance in a study of their impact. Before we can see the foreign policy kaleidoscope as a whole, we must examine the interactions among its individual components has to be carried out.

Think tanks interact with and adapt to other foreign policy kaleidoscope pieces. As an example of their adaptive strategies, think tanks often adjust their agenda to those of policymakers and “keep current on the everyday political and bureaucratic changes” in order to better “plug into the system in ways that academic scholars generally do not” (Wiarda, 2008, p. 99). The impact think tanks have on foreign policy, or at least the area of such impact, could be pre-determined, or at least significantly affected, by outside factors including the agenda of policymakers and other elements of the foreign policy system into which think tanks plug themselves. And policymakers are not the only integral part in it.

News media also could be affecting or possibly sometimes even determining what colors think tanks contribute to the foreign policy kaleidoscope. Think tanks interact extensively with news media in the foreign policy arena. However, despite the reliance of think tanks on news media and their tactic of deliberately adjusting their agenda to that of others, the relationship

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[7] A review of literature in next chapter provides a brief overview on the state of research on think tanks. It illustrates a consensus in academic world on the presence of think tanks influence in politics, and no agreement as per extent or exact nature of think tans impact.

between think tanks and news media is often described in academic literature as unidirectional (Abelson, 1996, 2009; Krastev, 2001; O'Neill, 2008; Rich, 2001, 2004; Weidenbaum, 2009, 2010). Prominent think tank researchers mention news media as "channels" (Abelson, 2006) used by think tanks to reach their goals, mere bullhorns for their messages.

While this channel of influence is of high and increasing importance for think tanks, they rely heavily on news media to disseminate and promote research (Abelson, 1996), establish visibility (Rich, 2004) for themselves and their sponsors, to militate for both their research findings but also their advocacy positions[8] and to ultimately "shape public opinion and public policy"(Abelson, 2009, p. 85). Regardless of the actual (and generally immeasurable) outcomes of the interactions between news media and think tanks, the latter are able to generate "a useful measurement of how much influence think tanks wield" (Abelson, 2012b, p. 1) - media exposure statistics. In the absence of other tangible proofs of their effectiveness, this statistic is widely used by think tanks to "foster the illusion of having influence" (Abelson, 2012b, p. 1).

Consequently, similarly to how they adjust to policymakers and bureaucracy (Wiarda, 2008), thinks tanks may have to make adjustments in order to garner media attention. They have to play by the media's rules to gain visibility and impact. After all, "… only the media can determine how much exposure these organizations will be granted" (Abelson, 1996, p. 90). In order to garner such valuable news media exposure, think tanks go to great lengths to accommodate the news media and streamline the work with them. Among other tactics, think tanks design programs to "flood the mainstream print media with hundreds of op-ed articles each

[8] As Donald Abelson (1996, p. 89) put it, "… education the public is not the sole objective of think-tanks," and as Wiarda (2008, p. 97) explains it "What members of think tanks do is think (and write and publish and disseminate their products) about public policy issues; they also serve as advocates for their public positions."

year" (Abelson, 2009, p. 87) and develop personal relationships with journalists. Some think tanks devote major resources to this end[9]. Because news media are important to think tanks, their agenda may affect the amount of attention think tanks pay to a particular topic, similar to how agendas of policymakers affect this attention. After all, news media manage to affect other pieces of the foreign policy kaleidoscope.

Literature on thinks tanks often fails to note that news media have a significant influence over political processes in the United States in general (Bimber, 2011; Entman, 2000; Rosefielde, 2007; Shapiro & Jacobs, 2000) and on U.S. foreign policy in particular (Miller, 2007; Nacos, Shapiro, & Isernia, 2000; O'Heffernan, 1991; Serfaty, 1990; Shapiro & Jacobs, 2000; Wiarda, 2009).

News media affect foreign policy in multiple ways[10]. They shape what concerns the public. By virtue of often being an exclusive source of information on foreign policy topics, they tell the public what to pay attention to[11] (Cohen, 1963), which issue to consider more important and which ones – less so (McCombs & Shaw, 1972). In doing so, the news media affect greatly salience of foreign policy issues, and through it, directly (in direct reaction from the government

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[9] Brookings Institution, for example, spent almost $2.3 million on communications in the 2013 fiscal year (Brookings Institution, 2014, p. 41), but Heritage Foundation valued the news media exposure enough to allocate nearly $11.4 million (or 6.8 percent of organization's operating expenses in 2013) to media and government relations (Heritage Foundation, 2014, p. 47).

[10] Most of which revolve around news media function of "collecting, framing, and distributing information—the key [foreign policy] market commodity" (Baum & Potter, 2008). In doing so, they enable new actors to gain access to this market, like the public, who otherwise may have been able to participate in the exchange.

11 Stuart Soroka (2003, p. 43) argues (as a result of another empirical inquiry of agenda-setting effects) that, at the end of the day, "… if we learn about these [foreign policy] events, it is almost surely the product of media coverage."

to changes in issue salience[12]) and indirectly (issue salience effects how politicians are judged[13]) affect foreign policy (Soroka, 2003).

The news media impact on foreign policy does not always have to be mediated by the public. Salience of issues in the news coverage has been shown to affect directly presidential (Edwards & Wood, 1999; Wood & Peake, 1998) and congressional (Soroka, 2003; Tan & Weaver, 2007) attention and actions, as well as the attention actions of policymakers generally (Cook et al., 1983).

Directly or through effects on the public, news media influence in foreign policy is often carried out though the agenda-setting mechanisms. In foreign policy research, agenda-setting is normally described as an interaction among three inter-influenced entities, the news media, the public, and policymakers (Edwards & Wood, 1999; Peake, 2001; Peake & Eshbaugh-Soha, 2008; Rutledge & Larsen Price, 2014; Soroka, 2003; Wanta, Golan, & Lee, 2004; Wood & Peake, 1998).

The very first systematic foreign policy agenda-setting study (Wood & Peake, 1998) looked at the president and the news media and interdependence of their attention to foreign policy issues. Congress quickly got injected into the mix of participants in foreign policy agenda-setting (Edwards & Wood, 1999) and soon after, the role of public opinion in the process gained some attention (Soroka, 2003) as well, followed by a good deal of evaluations for strength and directions of influences under various circumstances (Baum & Potter, 2008; Peake, 2001; Peake

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12 In Soroka's (2003, p. 41) research, "… public preferences have a positive and significant effect on defense spending [a foreign policy issue]" in both the United States and the United Kingdom.

13 Driven by the assumption of issue priming effect, that "by calling attention to some matters while ignoring others, television [or print] news influences the standards by which governments, presidents, policies, and candidates for public office are judged" (Iyengar & Kinder, 1987)

& Eshbaugh-Soha, 2008; Rutledge & Larsen Price, 2014; Tan & Weaver, 2007). No place has been allocated in the reviewed literature to think tanks in the news media, public and policymakers triangle.

An additional element, agenda-setting, buttresses the study's hypotheses. As the theory's connection to the context of the study, in its rather recent application to foreign policy formation, agenda-setting describes the mechanism of issue salience transmission between groups. This application of the theory does not include a possibly signifficant group, e.g. think tanks, and may need revision.

Rationale

This dissertation serves two main goals:

1. Advancing our understanding of the role think tanks play in foreign policy.

2. Bettering our knowledge of mechanisms for news media effects in foreign policy and to advance our understanding of the news media effects at large.

While academic literature speaks of think tanks as influential in foreign policy entities and alludes to their growing impact, the exact nature and magnitude of this impact are thought to be largely immeasurable at this point (Abelson, 2009). Think tanks, considering their potential weight in foreign policy formation and their close relationships with at least two of the traditional foreign policy agenda-setters (news media and policymakers), may have an integral role to play in the process of foreign policy agenda-setting. Foreign policy agenda-setting research tradition may provide a valuable conceptual and methodological framework for detecting and measuring the strength of the content produced by think tanks. If evidence of their influence on classic agenda-setters is found, the traditional foreign policy agenda-setting

triangulation will have to change shape and include think tanks. This research could find signs of a dependence between think tanks foci and news agenda and thus provide such evidence.

As already alluded to, the news media influence the public and policymakers. We posit here that the media could also influence other major participants in the political process, such as think tanks. Walter Lippmann's "out of sight, out of mind" formula may be very much applicable to the process of the formation of think tanks foci. In *Public Opinion*, a work fundamental for agenda-setting research, Lippmann (1922) suggested that the world of politics (in particular of international relations including foreign policy decision-making, as in our case) is remote from our everyday lives. It is not unfolding right before our eyes. The public in particular, but also research fellows and policy consultants, have to rely on news and other sources for information about these foreign policy processes. The news media could also be telling the think tanks "what to think about" (Cohen, 1963, p. 13). While no major research of agenda-setting effects on organizations, such as foreign policy-oriented think tanks, was found in the review of academic literature, this study aims to advance our understanding of the media's agenda-setting mechanisms.

Should think tanks show themselves to be another affected by news media, along with the public and policymakers, this would demonstrate the news media's ability to affect research organizations and to set foci for policy research and advocacy. As related to foreign policy, think tanks, if their foci are affected by salience of issues in news coverage, could be mediating and/or amplifying news media agenda-setting effects on U.S. foreign policy. If detected, studies of media effects on think tanks, through think tanks, and aided (or compromised) by think tanks effects on policymakers and the public, may help us build a more comprehensive foreign policy

agenda-setting models and learn more about circumstances under which agenda-setting effects are possible.

This investigation of the potential link between think tanks and the news media could also contribute to the resolution of the addressed in the next chapter. While a great variety of definitions circulate academic literature (Ladi, 2005), divorce of think tanks from outside influences is often used as a factor in their definition as independent organizations or at least a basis to distinguish between various types of think tanks. For example, in a revised version of one of the most popular (Pautz, 2011) definitions by Kent Weaver, think tanks are "non-governmental, not-for-profit research organisations with substantial organisational autonomy from government and from societal interests such as firms, interest groups, and political parties" (McGann & Weaver, 2000, p. 4). Another popular definition considers think tanks to be "independent, non-interest-based, non-profit organizations that produce and principally rely on expertise and ideas to obtain support and influence the policy-making process." The level of independence of think tanks, organizations that adjust their agenda to fit that of policymakers, or (if the proof is found) that of news media as well, could be questioned and definitions might need to be revised.

Interdependence of media agenda and agendas of think tanks is a crucial aspect of the interaction between the two institutions, for it reflects of the influences they could be exerting on each other. In order to understand think tanks and news media individual and combined impacts on foreign policy, it is important to study this aspect of their relationship in more detail. The fundamental questions addressed, are (1) whether choices of research and advocacy topics think tanks make could be affected by the dynamics in news media attention, and (2) could the foci of think tank attention be affecting what the news media cover? To answer these questions, the

dissertation compares dynamics of attention to different countries in work published and mentioned on the websites[14] of Brookings Institution and Carnegie Endowment for International Peace, the two most influential think tanks in U.S. foreign policy[15], and content[16] of major newspapers, *The New York Times* and *The Washington Post*, over a period of time.

These questions are developed further in light of the agenda-setting theoretical approach, and presented, alongside with research hypotheses, in chapter three.

This study will advance our understanding of the role policy think tanks play in foreign policy and the ways they can possibly affect it. Such an understanding could help both policymakers and think tanks establish and maintain productive relationships. Additionally, knowing what role, if any, news coverage plays in determining the attention of think tanks would enable us to discover a new channel of their influence on world politics, and though it, on lives of people.

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[14] Research articles, commentary, lectures, symposia, interviews, policy recommendations, testimonies and other recorded and other activities published by think tanks on their websites.

[15] According to their ratings in 2013 Global Go to Think Tank Index Report (McGann, 2014). See Chapter 4 for more detailed explanation.

[16] News stories, editorials, blogs.

Chapter 2.
Background

There is a great deal of ambiguity in academic literature about the term think tank and the phenomenon it represents. The first section of this chapter, in separate subsections, looks at some of the reasons behind the difficulties in defining and classifying think tanks, including independent evolutions of the term and the phenomenon, peculiarities of think tank evolution, and the fact that organizations that originated in various periods still coexist together. Lastly, the section briefly discusses the diversity of approaches to think tank classifications and defines the term as it is used here.

The chapter then describes the state of research on think tanks and gives an overview of academic literature on their interactions with news media. It then makes a case for the active role of news media in foreign policy, while paying special attention to the mechanisms of foreign policy agenda-setting, in which news media are considered a fundamental element. The chapter concludes with a brief discussion of the evolution of foreign policy agenda-setting research and demonstrates where think tanks may fit the model.

History of the term think tank

According to Paul Smith (1971) “the think tank is really the brainchild of Dr Vannevar Bush,” an MIT professor who was able to work successfully with the U.S. Air Force during the Second World War. The “brainchild” materialized in 1945 in the formation of one of the oldest think tanks, Project RAND, restructured three years later into the Rand Corporation (RAND, n.d.). Historical records and anecdotal evidence suggest, however, that think tanks, both the term and the phenomenon, trace their origins much further back.

Smith discovered that early uses of the term “think tank” could be found in the 1908 edition of Partridge’s *Dictionary of Slang and Unconventional English*. The metaphor was used then as a synonym for “think box” and referred to the brain of an individual. During WWII, the term think tank was often used in military jargon to describe “a secure room where plans and strategies could be discussed” (A. Denham & Garnett, 1996, p. 44).

The term had existed for a long time and had different meanings before it was associated with organizations it denotes today. It was not until the 1960s that the term was widely used by U.S. mass media to refer to non-profit research and advisory corporations, which in their turn, had been in existence for some time before acquiring their name. RAND became an independent organization in 1948; Brookings Institution formed in 1916 (Brookings Institution, n.d.-b); and the Carnegie Endowment was founded in 1910 (Carnegie Endowment for International Peace, n.d.-a).

The evolution of think tanks seems to have begun well before they acquired their name. According to Donald Abelson (2009, p. 17), “very few” policy institutes existed until WWII, but he admitted that some think tank-like organizations did exist prior to the period. In his 1991 book, *The idea broker : think tanks and the rise of the new policy elite*, James Smith (1991, p. 1) quotes President Woodrow Wilson: “What I fear therefore, is a government of experts. God forbid that in a democratic country we should resign the tasks and give the government over to experts.” Smith used this quote to illustrate the role that university-trained policy experts had already began to play in the U.S. policy making by the beginning of the twentieth century, well before Project Rand was conceived.

Among other organizations, the Russell Sage Foundation and the Bureau of Municipal Research, both established in 1907, are sometimes mentioned as the first U.S. national think

tanks (Rich, 2004). These were not just ephemeral "experts," singular and unorganized, but structured task forces, designed to solve particular problems for the U.S. government – very much like Project Rand and some of the more recently established[17] consequential organizations.

Paul Dickson argued that the think tank phenomenon predated the term "think tank," whatever meaning the term had. "It started in 1832, when Secretary of the Treasury, confronted by pesky steam boilers that kept exploding in American steamboats, contracted with the Franklin Institute of Philadelphia to study the problem" (Dickson, 1971, p. 9).

Abelson (1996) went even further in saying that "… the physical absence of autonomous, non-profit, research institutions prior to 1832 cannot by itself be used as a barometer to measure the interaction between intellectuals and government." He argued that major educational institutions (e.g. Harvard University, Yale University, Princeton University, Columbia University and Brown University), which existed even before the Franklin Institute was established, were bound to interact with government officials and to share their research results. Even though he failed to provide any proof of such interactions, Abelson raised a valid point in pushing the period of think tanks origins farther back in order to better understand their evolution, and thus their functions, influences, and the nature of their interactions with other political players.

The Second World War, "when the government drew heavily on the scientific community to wage war," (Dickson, 1971, p. 11) and the period of extensive political changes of

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[17] According to Donald Abelson (2009), three waves of think tanks formation followed WWII and creation of RAND, during which some of today's top foreign policy think tanks (McGann, 2015) were founded, including Foreign Policy Research institute (founded in 1955, 49th top foreign policy think tank in the world), Hudson Institute (1961, 41st), Heritage Foundation (1973, 24th), Cato Institute (1977, 17th), Center for Strategic and International Studies (1962, 5th).

the late 1970s and 1980s gave birth to many think tanks. James Smith (1991) estimated more than 1,200 private and university-based think tanks were functioning in the United States by the 1990s. According to 2015 data from the Think Tanks and Civil Society Program at the International Relations Program, University of Pennsylvania, there were more than 1,800 think tanks in the USA (McGann, 2015).

What could we consider a "think tank" then? Which of the proposed 'ancestors' could be used as the prototype? The answer is: very likely, none of them. However, the fact that so many 'species' are treated as the 'primeval think tank', along with the short history of the term (after its re-adoption as a descriptor for certain organizations and groups), could explain the ambiguity in modern definitions. While the term "think tank" did not appear with the birth of any of the 'primeval specimens' discussed above, narrowing our definition before looking in more detail at various ways to group them could leave a key actor, think tanks, out of consideration.

The academic literature describes two different, yet often overlapping groupings of think tanks, periods of development, and structural or (sometimes both) functional distinctions.

Periods of think tank development

Think tanks in the United States have been developing in different socio-political circumstances, which, to certain degree, determined the nature of their organizational structure, missions, ideologies, and tactics. Academic literature defines several notable periods of think tank development, usually connected to major historic events and accompanying them socio-political transformations.

David Ricci (1993) assigns two such periods, the Liberal Age and the Conservative Response. The former is associated with the rise of political activism during John F. Kennedy's

presidency and the flourishing of public interest groups (e.g. Center for Responsive Law, Congress Watch, etc.) and new federal offices (e.g. Environmental Protection Agency, Consumer Product Safety Commission, et al.), aimed at reforming various "quality-of-life matters," (Ricci, 1993, p. 149). The latter period is characterized by the emergence of the "New Right" institutions (e.g. Heritage Foundation, Christian Voice, et al.), which condemned the "weak on strategic thinking" practices of the "Old Right," which mainly reacted to liberal pressure as opposed to initiating its own projects (Ricci, 1993, p. 155).

According to Andrew Rich, there were four periods, starting at an earlier date. The first American think tanks (the Russell Sage Foundation and the Bureau of Municipal Research, both incorporated in 1907) were adherents to the ideals of a Progressive Era[18] and were confident that "expertise from the burgeoning social science could solve public problems and inform government decision making" (Rich, 2004, p. 34). By the middle of the twentieth century, think tanks had established their presence in American politics, but were changing and adapting to the new environment. The aftermath of the Depression and the demands of the Second World War drove U.S. government officials to hire think tanks directly[19]. In anticipation of the end of the war, private interests also began hiring think tanks[20] in attempts to generate high employment in the postwar economy, thus beginning the third period in the development of think tanks,

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[18] The Progressive Era, a period between the 1890s and 1920s, was characterized by innovative policy and an unprecedented number of reforms intended to fix multiple issues brought about by the industrialization in the United States. Supporters of the Progressivist movement "fought to expand democracy, professionalize government, and make industrial capitalism more humane" (Robertson, 2014).

[19] This is the time when President Franklin D. Roosevelt formed the "brain trust," a group of senior officials and advisees that included Columbia University professors (Patrick, Pious, & Ritchie) and when RAND began advising Air Force (RAND, n.d.).

[20] As an example, established in 1942, the Committee for Economic Development (CED) worked directly with the Chamber of Commerce and the National Association of Manufacturers; and the American Enterprise Association was formed using money from Louis Brown of the Johns Manville Corporation (Rich, 2004).

characterized by a higher level of diversity of politically credible organizations. The ever-growing government was casting a thick shadow on "desirability and possibility of achieving social change though governmental programs" (Rich, 2004, p. 45). During the fourth period, the relationship between the growing government, which caused some problems by its own efforts or lack of thereof (i.e. civil rights issues during the Vietnam conflict), and think tanks changed significantly in the 1960s. Political mobilization of businesses, Christian groups, as well increasing popularity of neoclassical economic theory at universities, and the resurgence of the Left after its retreat during the McCarthy era, accommodated the flowering of conservative think tanks in 1960s and 1970s. Concurrently, even more liberal institutions were gathering strength in response to what they saw as the government's incapacity to bring about desirable (liberal) changes. These factors triggered some very significant changes in the world of think tanks and American politics. The 1969 Tax Reform Act disallowed support of efforts to "influence the outcome" of political campaigns and legislation, which removed some of the key donors (which had been the main source of funding for think tanks up until this point[21]) as sponsors for think tanks. Changing patronage shifted the priorities for think tanks in the new era of their development, giving prominence to marketing activities and creating the necessity to emphasize their own visibility in order to attract financial support.

In another historical analysis, the evolution of think tanks spans three typological generations, according to their main goals and donors (Abelson, 1996). Think tanks of the first generation (exemplified, among other organizations, by The Carnegie Endowment for

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[21] The Ford Foundation and the Rockefeller Foundation, two of the principal funders for think tanks, were involved in the investigation, which resulted in the Tax Reform Act. Brookings Institution, for instance, received a $14 million grant from the former in 1966 and was supported earlier by the latter. After the reform, these two, and other sources of monetary support were lost for think tanks (Rich, 2004).

International Peace and the Brookings Institution, and reaching into the mid and late 1940s) were philanthropic, meant to provide "a stimulating environment in which to conduct scholarly research," as opposed to "indoctrinating the policy-making community with a particular ideological orientation" (Abelson, 1996, p. 47). The second generation of think tanks, the "government contractors," such as the Rand Corporation, were hired by the U.S. government following WWII in hopes to "… meet many of the new challenges confronting the United States as it assumed the role of a global hegemonic power" (Abelson, 1996, p. 47). The third generation of think tanks was characterized by the transition from policy research to political advocacy. Among others, The American Enterprise Institute, The Heritage Foundation, Center for Strategic and International Studies (CSIS), The Trilateral Commission and The Committee on the Present Danger employed various lobbying techniques in order to advance their ideological agenda, as opposed to having the pursuit of social science research as their primary goal. It is important to note that the three periods overlap chronologically and the main determining criterion in attributing a think tank to one generation or the other is in its missions and goals. So, for example, while established in 1948, Rand Corporation belongs to the second generation established in 1943, while the American Enterprise Institute for Public Policy Research exemplifies the third. The former started out as a government contractor and served mainly the needs of the Air Force, while the latter was established by a corporation president and had the promotion of free-market economy as a goal.

Abelson's generations of think tanks, in a sense, are closer to some of the following functional and structural classifications than to the periodical groupings presented earlier, since chronological order in which think tanks were founded is of lesser importance for categorization of think tanks then their structure and activities. Some organizations, including the Brookings

Institution and the Carnegie Endowment for International Peace, even though they belong to older generations, still exist today and function in the new environment alongside with newly emerged and emerging counterparts.

Classifications of think tanks and working definition

In her comparison of different think tanks typologies and classifications, Stella Ladi (2005, p. 49) Claimed to have realized "why scholars find it so difficult to establish a single definition." She looked at Weaver's typology (R. K. Weaver, 1989), McGann's classification (McGann, 1995), and Diane Stone's (1995) take on the grouping of policy research organizations and found little consensus among these different understandings of what defines a think tank and what organizations one should call think tanks.

To date, multiple attempts at classifying think tanks have already been made. Some deserve special attention as more popular or representative trends in research of think tanks.

Paul Smith, for example, identified seven categories of non-for-profit institutes in the United States, based on their main goals and missions. The first group, the independent contract research institutes (Batelle, Stanford, Midwest, etc.), does "research in public interest." Smith (1971, p. 35) noted that "essentially the contract research institutes are clinics of technology … which are useful to the public and profitable to sponsors." Advisory corporations (Rand Hudson), the second type, work with federal agencies. The third type works on international issues with no government contracts and funding involved (e.g. Center for Strategic and International Studies). Another group of institutions investigates economic, political and social trends (i.e. the Institute for Policy Studies, Center for Research in Conflict Resolution). Other institutes conduct "systematic and comprehensive" studies of the future, some smaller

organizations specialize in regional and local issues, and some institutes are aimed at promoting knowledge and learning (Princeton, and others). Based on their scope, three of the seven groups are of special interest since they deal directly with policy issues.

Donald Abelson suggested classifying think tanks based on their position on research and advocacy, their funding sources and their main target audiences. He started with three types described by Kent Weaver (1989) and added two more groups. Identified in Weaver's work as *universities without students*, the first group of think tanks aims to promote a greater understanding of important social, economic, and political issues. These organizations are "at the top of the food chain of hierarchy of think tanks," they are large, and usually composed of scholars primarily interested in research and writing (Abelson, 2006, p. 45). *Government contractors and specialists* (also Weaver's term), such as RAND and the Urban Institute, shape their output in the form of advice and recommendations for their employer – the U.S. government. They enjoy greater access to federal departments and agencies, which (as Abelson illustrates with examples of RAND's recommendations being ignored due to wishes and political concerns of Congress and the Executive) does not guarantee greater impact on policy. *Advocacy think tanks* are "the most common type of think tanks in the United States and other Western Democracies" (Abelson, 2006, p. 47). Their main purpose is to influence policymaking in a particular direction. They emphasize production of brief reports for policy-makers. Abelson's fourth category is the *vanity* or *candidate-based think tanks*, which generate ideas for political candidates to draw on during campaigns. The last class, *legacy think tanks*, are created by "former presidents and cabinet secretaries intent on leaving their mark on public policy well after leaving office" (Abelson, 2006, p. 48). While trying to compare U.S. and Canadian think tanks, Abelson abandoned the two types he added to Weaver's classification (Abelson, 2009, pp. 18-

21). In his descriptions of the five different classes of think tanks, Abelson did not use all three factors that seemed to have formed the basis for the above classification.

James McGann (2011, p. 19) describes four "ideal" types of think tanks (not dissimilar to those proposed by Abelson earlier): academic, contract researchers, advocacy think tanks, and party think tanks. He suggested that most think tanks are variations of these four. McGann proposed looking separately at each think tank's affiliations and then its culture, objectives, and interests served. According to the first criterion, he described seven groups of organizations, ranging from autonomous and independent to university- or party-affiliated, to for-profit. He further divided independent and affiliated think tanks into eight groups. However, McGann (2011b, p. 22) noted that "most think tanks do not fit neatly into any one category."

Organizations within the scope of this research were separate from policy makers and other unities – they were considered independent actors, along with the U.S. government and mass media, in the U.S. foreign policy. And while various classifications and definitions may include other types of organizations and groups, McGann's vision of think tanks as "independent public-policy research organizations" was adopted for the purpose of this research:

> Think tanks, which function as public-policy research, analysis and engagement institutions, generate policy-oriented research, analysis, and advice on domestic and international issues, enabling policy-makers and the public to make informed decisions about public-policy issues. Think tanks may be affiliated with a political party, a university or government, or independent institutions that are structured as permanent bodies, not ad hoc commissions (McGann, 2010b, p. 1).

To further narrow our definition, the research deals with think tanks, or independent public-policy research organizations, which focus primarily on or influence significantly the U.S. foreign policy. The Methods chapter details the criteria used to select particular organizations for analysis.

State of research on think tanks

Several theoretical and conceptual approaches to think tanks were described in the literature. While there is no consensus on the exact role and impact of think tanks in policy process, most agree some influence takes place.

Donald Abelson described four competing approaches to understanding think tanks (Abelson, 2006). Some scholars, he argued, treat think tanks as "elite organizations that rely on their expertise and close ties to policy-makers to advance the political and economic interests of corporate and philanthropic sponsors." (Abelson, 2006, p. 97). The "deeply rooted in the American pluralist tradition" (Abelson, 2006, p. 101) second approach does not reserve an exclusive place for think tanks and views them as similar among many other participants on the marketplace of ideas, such as trade unions, interest groups, environmental organizations and others. Within the third approach, which Abelson calls "statist" (Abelson, 2006, p. 103), think tanks and other non-governmental organizations have a modest place in the state decision-making process. Though the influence of think tanks is acknowledged by the scholars advocating this latter approach, they emphasize the autonomy of the state in decision making. Lastly, Abelson described a group of three distinct approaches gathered under the umbrella of institutionalism. All three focus more on institutional structures of think tanks and their orientations, as opposed to their relationships with and influence on the state.

Scholars argue the superiority of some approaches over others. Thomas Medvetz (2012), for example, found both elitist and pluralist approaches flawed in their tendency to "prejudging" (Medvetz, 2012, p. 12) think tanks. He saw the clear advantage in utilizing the institutional approach since "the approach does not lock us into a tautological argument about what a think tank does" (Medvetz, 2012, p. 13).

In his later works, Abelson offered a "new conceptual framework" (Abelson, 2009, p. 58). He argued that think tanks differed too much in the goals and resources at their disposal in order for either of the above-mentioned frameworks (elitist, pluralist, statist, or institutional) to be accepted exclusively. Originating from the assumption that "not all organizations have the desire or the necessary resources to participate at each stage of the policy cycle: issue articulation, policy formulation, and policy implementation" his new concept suggested analyzing the impact of think tanks at different stages separately (Abelson, 2009, p. 59). Abelson offered taking advantage of different approaches depending on which of a think tank's aspect or feature one tries to understand at the moment, but he urged scholars not to "…adhere rigorously to any one framework" (Abelson, 2012a, p. 30). He speculated that "foreign policy and the process by which decisions are made is complex and can rarely be explained by one theory" (Abelson, 2012a, p. 30). Attempts to measure and compare outputs produced by think tanks and effects engendered these approaches.

As Murray Weidenbaum (2009, p. 87) noted, "surely, their [major think tanks] influence varies by organization, issue, and time period". This influence is not easy to measure, due to difficulties with its operationalization (Abelson, 2004); complexity of the phenomena that the influence is aimed at, for example, public opinion, and climate of opinion (Sanders, 2009); and

difficulty in tracing origins of ideas “in an increasingly crowded political arena” (Abelson, 2009, p. 90).

As was mentioned, many scholars and think tanks themselves consider news coverage as a valuable indicator of the potency of think tanks (Abelson, 1996, 2006, 2009; Ahmad, 2008; Krastev, 2001; McNutt & Marchildon, 2009; Rich, 2001, 2004; Rich & Weaver, 2000; Sanders, 2009; Weidenbaum, 2009, 2010). Think tanks have a close relationship with news media, which is very valuable in their mission to propagate messages and e.

Think tanks and mass media

A few attempts were made to describe the close relationship between think tanks and mass media in more detail. Works of Donald Abelson and Howard Wiarda deserve special attention for they have gained popularity among think tanks scholars and are representative of the mainstream views of the issue.

Abelson viewed the relationship between media and think tanks as symbiotic. By utilizing research and commentary from think tanks, the mass media “… are attempting to provide their audience with a more comprehensive understanding of complex political issues” (Abelson, 1996, p. 81), which should theoretically increase public awareness about these issues and thus aid mass media in fulfilling their main objective. In return, think tanks gain access to a channel of influence over public opinion and public policy. “At the very least,” Abelson speculated, “media exposure allows think tanks to plant seeds in the mind of the electorate that may develop into a full-scale public policy debate” (Abelson, 2009, pp. 85-86). While the actual influence is quite important for think tanks, Abelson (2006, p. 156) argued that it is “more

important, think tanks understand that media exposure creates the illusion of policy influence, a currency they have a vested interest in accumulating."

In other words think tanks gain not only a channel for influencing policy from news media exposure; they also build up their prestige and trustworthiness and gain visibility for themselves as well as for the people and organizations they represent. Abelson stresses the discrepancy in the news media goals to increase public awareness and the objectives think tanks pursue. The latter, in his view, were the more active players in this relationship, and influence balance between news media and think tanks looks rather unidirectional in this case. He described tactics employed by think tanks in order to increase their media exposure, including taking steps to "flood the mainstream print media with hundreds of op-ed articles each year;" developing personal relationships with journalists, and spending millions of dollars on media and government relations (Abelson, 2009, p. 87) [22].

Wiarda (2009), when discussing different parties involved in making U.S. foreign policy, assigned a more active role to the news media. He talked of yet another symbiosis involving media and government. Yet, again, the news media were in need of information and the informant was eager to use them to carry their own messages to the public. Wiarda (2009, p. 99) noted, "… the media now interpret the news and have themselves become regular participants in the drama." The news media's influence, in Wiarda's opinion, was higher in 2009 than it had ever been. He talked in particular about the ability of the mass media to set the agenda, to "hype the news," and their actual involvement in policy-making (Wiarda, 2009, p. 118).

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[22] According to the think tank's annual report, The Heritage Foundation spent $11,378,839 on "media and government relations" ("Annual Report 2012," 2012), nearly 15% of its total operating expenses; one could assume that some of the $15,171,785 spent on fundraising in 2012 included mass communication-related expenditures.

At the same time, multiple factors impede the quality of foreign policy issues coverage by some news media. Professional practices, such as attempts at representing multiple positions on every issue, sometimes make nonviable, non-legitimate positions look like they have the same weight as educated consensus among policy makers. Wiarda provided some examples of possible scenarios as well: (1) transformations in the field - shrinking numbers of foreign correspondents, and the overload of journalists with "too much territory to cover" (Wiarda, 2009, p. 116); (2) lack of expertise among professional journalists in issues they cover, their aggressive tactics and attempts to "ferret out sensitive information" (Wiarda, 2009, p. 115) - result in "foreign policy issues that U.S. citizens need to understand" being "… often ill-reported, underreported, or not reported at all" (Wiarda, 2006, p. 53).

Wiarda went as far as offering a list of recommendations for foreign policy analysts on how to review and interpret news about foreign policy. In order to avoid misinformation, among other precautionary tactics, he recommended adopting skepticism toward news coverage, widening the circle of news sources, sorting out biased authors, and being aware of media bias and incomplete, oversimplified analyses.

While considering news media a more active element of foreign policy building, along with the public, interest groups, think tanks, and of course, government institutions, Wiarda also described the relationship between media and think tanks as unidirectional. Think tanks, or as he called them, "powerhouses," use mass media actively to extend their influence on policy formation. Being readily available, while "...their offices in Washington are practically next to the television studios" (Wiarda, 2008, p. 110), think tanks are a cheap (read 'free') source of expertise, polarized views, and borrowed credibility for journalists.

While both Abelson and Wiarda discuss mainly one side of the relationship between think tanks and news media, in which media are presented as mere channel for messages produced by think tanks, there are reasons to assume that there is more to this association. For one, the news media control the mass communication channels think tanks are eager to get access to. And, as discussed in the next section, they also play a rather active role in foreign policy.

News media and foreign policy

Bernard Cohen's work was the first scholarly attempt to undertake "systematic explorations of the relationships of the press and foreign policy" (Cohen, 1963, p. 3). Driven by the assumption that people in a democratic system need to be informed by independent media in order to be able to make sound decisions, he attempted to evaluate the ability of the nation's free press to cope with this task. While the main goal of his research was to assess the quality of the work of news media with regard to the U.S. foreign policy, Cohen also conceptualized the functions of news media in the foreign policy process. The press, he inferred from interviews with correspondents and representatives of the Executive branch and the Congress, carried out three major roles in foreign policy formulation and implementation: the observer, participant, and catalyst roles. As a rather active participant in the process, the press realizes its main impact on foreign policy through the function of "map-making." In unison with Walter Lippmann's idea of human reality being "pictures in our heads" based on the information we have (Lippmann, 1922), Cohen (1963, p. 13) suggested that "…if we don't see a story in the newspapers (or catch it on radio or television), it effectively has not happened so far as we are concerned." Foreign policy coverage, determined by many factors, including discrepancies in the goals and visions of

journalists and the government, ends up being "spasmodic, piecemeal, impressionistic, and oversimplified, sometimes inaccurate or garbled, and generally failing to deal with policy issues until they have become matters of public record" Cohen (1963, p. 267) concluded. The nature of interactions between policymakers and the press can force the news coverage to close on itself, when, in the absence of reports from their sources and new occurrences, journalists' questions are stimulated solely by previous coverage. As an almost exclusive source of information for "pictures in our heads," the press, Cohen argued, "… may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about" (Cohen, 1963, p. 13). The latter is essentially the substance of the main hypothesis for the Maxwell McCombs' and Donald Shaw's agenda-setting theory, discussed in a later section of this dissertation.

Patrick O'Heffernan (1991) elaborated further on the idea of media-created reality almost three decades after Cohen's first major empirical exploration of mass media role in U.S. foreign policy. O'Heffernan (1991, p. xi) tried to find out "how do the mass media shape the political dimension of the world?" In his evaluation of the role news media played in politics, he analyzed interviews (both quantitative and in-depth) with officials, reviewed archival documents and assembled case studies from news broadcasts. Like Cohen, O'Heffernan drew a picture of a very active news media involvement in foreign policy. He argued that news media take initiative in foreign policy formulation and execution and supported this statement with anecdotal evidence of media directly affecting policy outputs. The news media, he said, also have control over "… shape, tone, and emphasis of U.S. foreign policy… ." (O'Heffernan, 1991, p. 6). While exposing more people to foreign policy-related news (which was made possible with advances of

technology and other factors), news media encourage more players to join in the process – foreign policy acquires more of a domestic flavor.

While development of American news as a profit-driven business enterprise stimulated the evolution of high spread communication technology, foreign policymakers have had to adjust to the speeds of information delivery and pick up the pace of work. Diplomats can no longer enjoy the luxury of extra time in preparing their communiqués – expectation of fast information delivery applies across the board. Simultaneously, acquiring and disseminating information has become increasingly easier, which gives many involved parties (foreign governments, businesses, terrorist groups, etc.) access to information through news media before anything reaches them through diplomatic communication channels. New groups, like the wider public, now enjoy access to this information as well, since it is no longer in the exclusive domain of diplomatic communication. In short, selected news media make information consumers more aware of foreign policy, determine which aspects of external relations will have a chance to become a part of public agenda, and they force policy makers to adjust for new audiences. O'Heffernan (1991, p. 97) went so far as developing the "Insider model of media-influenced foreign policy" in which "media simultaneously occupy a location in all of the policy process' inner circles and operate outside of the circles to influence actors on the inside."

One could argue that such views are outdated. Advances in technology, changing national and international legal frameworks, as well as shifts of powers and priorities on both national and international political arenas could drastically change the set of players and nature of interactions in foreign policy. Even if Cohen and O'Heffernan were right in their observations twenty and fifty years ago respectively, things could look quite differently in the future. A more recent

inquiry into the issue by Robert Entman (Entman, 2000, 2004) would not allow one to be so dismissive of their ideas.

Entman (2004, p. 95) suggested that the end of the Cold War made the foreign policy environment more complex and enabled players other than presidents to affect the process by "… liberating journalists – and elites and citizens – from the habits of Cold War thinking." The problem in the international arena (communist aggression and world- conquering admission) and its cause (communist ideology) used to be clear and virtually singular. The solution rested with the ideological counterpart – the democratic world, and, Entman (2004, p. 95) argued, "virtually any problematic situation that arose in the world could be, and was, assimilated to the Cold War paradigm." New issues, like September 11 and the U.S. government's reaction to it, shifted the foci and the corollary of defining issues and solutions. In addition, proliferation of new technology allowed for more independent construction of frames: while it is more difficult to reframe an issue verbally, it is arguably easier to do so with images as a source of information and a part of a message. And while the news media's ability to influence foreign policy would fluctuate, depending on the position and actions of current administrations, they remain a powerful independent player in foreign policy formation and implementation.

News media create images in our heads (Lippmann, 1922), tell us what to think about and map our political world (Cohen, 1963), determine our political reality, and penetrate all stages of foreign policy process (O'Heffernan, 1991), while the political environment seems to be becoming increasingly supportive of their active involvement (Entman, 2000). And while a great deal of empirical and anecdotal evidence illustrates a very active mass media role in foreign policy formation and implementation, descriptions of the unidirectional relationship between news media and think tanks found in existing literature seem to be ignoring this active position

of news media and keep describing them as the tools used by think tanks. Great ‘grey areas’ in research on think tanks in U.S foreign policy are apparent.

News media and foreign policy agenda-setting

Think tanks are recognized as influential players in the foreign policy arena, and so are the news media, which affect policymakers and other actors involved in the foreign policy process (NGOs, policy makers, congressmen, public, terrorists, corporations, and foreign governments). While influencing other participants in the foreign policy processes, news media are likely to affect think tanks as well. Various mechanisms of news media involvement in foreign policy have been described in the literature, as alluded to in the previous section, and agenda-setting remains the most significant.

Agenda-setting started as and remains traditionally bound to the study of salience of (or attention to) issues in mass media and public agendas (McCombs & Shaw, 1993). However, attempts were made to extrapolate the basic assumptions of the theory (media telling the public what to think about) onto other potentially influenced entities: organizations, opinion leaders, and decision makers. In particular, research shows that media can affect the agendas of policymakers and decision makers alike.

For example, in a study of the Belgian government, parliament and media, Walgrave, Soroka, and Nuytemans (2008) found that the media affect the choice of topics and their salience among policy makers in what they called a closed political system, where “political parties have a great deal of control over the political agenda” (Walgrave et al., 2008, p. 816). Another team of researchers examined previous agenda-setting studies and found that conclusions about the degree to which news media can influence political agendas depends largely on the methods

employed in a particular research design. Regardless of the measurement of effects, they concluded “mass media do set the political agenda to some extent” (Van Aelst & Walgrave, 2011, p. 306) By surveying parliamentarians, they learned that European policymakers themselves perceive media as very influential in their decision-making.

In a country such as the United States, where politicians pay close attention to a great variety of outside factors, such as public opinion, interest groups, political parties, individual policy entrepreneurs, and the mass media (Jones, 2005, pp. 90-92), evidence drives scholars to recognize that news media influence policy in general and the foreign policy agenda in particular. In his study of U.S. and U.K. opinion polls, as well as data from the American National Election Study, Soroka (2003) found a strong connection between public opinion, media agendas and foreign policy, arguing that their interplay affects policy agenda greatly.

Evidence of the news media’s ability to influence directly not only the public agenda but also policy makers dates back to Cook et al. (1983). In an experimental study they interviewed a sample of policy makers before and after investigative stories they knew from journalists were about to be published or broadcast. They conducted a series of surveys after either exposing representatives of the general public to experimental content or making an effort to prevent them from watching the program. The research team was trying to gauge and isolate public opinion change, which was shown in a number of other studies (Burstein, 1998; Page & Shapiro, 1983; Soroka, 2003) to affect the agenda of policymakers. Their combined analysis of interviews with policy makers and the change in public opinion data showed that news media were capable of affecting policy directly, not only via their impact on public opinion. In a later study, Edwards and Wood (1999) found that “most of the time the president reacts, responding primarily to

fluctuations in media attention and world events," thus providing additional evidence of news media's direct impact on foreign policy makers.

Wood and Peake (1998) found that, when it comes to foreign policy issues, news media attention affected the presidential agenda (at least its public component), while the opposite, the president affecting the foci of news media, did not hold true. Wood and Peake were among the first researchers to look at foreign policy, as opposed to domestic policy issues traditionally targeted in agenda-setting studies. The president is the central figure in U.S. foreign policy process. However, he does not have full control over issue salience in the field, nor does he seem to remain unaffected by "continually unfolding international drama" production, the interpretation of which is in the hands of the mass media (Wood & Peake, 1998, p. 182).

While the research was concerned with more salient issues of the Arab-Israeli conflict, the Bosnian Conflict, and relationships with the Soviet Union, Peake's more recent study (2001) found that in dealing with less salient issues, presidents could be successful agenda-setters. Their ability to affect levels of congressional and news media attention to salient issues, on the other hand, is insignificant. A more recent study supports the idea of issue-determined, situational presidential agenda-setting powers, this time, affecting Congress (Rutledge & Larsen Price, 2014). And another study conducted by Peake and Eshbaugh-Soha (2008) found that a president's ability to influence salience of issues via presidential TV addresses depends substantially on outside factors, including previous news coverage.

Think tanks could be providing another avenue for news media to affect foreign policy agendas by creating an agenda-setting chain reaction. Similar to the way in which changes in public opinion are reflected in policy agendas, changes in think tank foci may be directing the

attention of policymakers to certain topics. To begin the exploration of such possibilities, one first has to assess the impact of media content on think tank foci.

Chapter 3.
Theoretical framework and Research Questions

Research on political agenda formation within the agenda-setting tradition will serve as a starting point in exploring sources of influence on the research and advocacy foci of think tanks. This dissertation tests the assumptions underlying the agenda-setting theory by comparing patterns in attention to foreign countries and foreign policy topics in national news and in content published by think tanks on their websites.

Agenda-setting theory

The origins of the agenda-setting theory are traceable to Walter Lippmann's theories on the mass media's role in the formation of political reality. The political world, and even more so the world of foreign policy, "is out of reach, out of sight, out of mind," and the information we have to build our knowledge and perception of with comes from mass media (Lippmann, 1922, p. 29). According to this logic, since "whatever we believe to be true picture, we treat as if it were the environment itself," news media are capable of building our political reality by providing pictures to believe (or not) in (Lippmann, 1922, p. 10). Cohen, and others who agreed with him, base a good deal of their research on this assumption, with some clarifications to it, of course.

Cohen (1963) posited that the media are not always successful in telling people what to think. Instead, they successfully tell audiences what to think about. Maxwell McCombs and Donald Shaw (1972) set out to test this by analyzing issue priorities among 1968 presidential election voters and mass media coverage in the corresponding period. They claimed to have found enough support for Cohen's assumption in their data, to conclude that journalists, editors,

newsroom staff, and broadcasters alike play an essential role in shaping our political reality by choosing what is news and what is to be presented to audiences.

Further research provided additional detailed information addressing the agenda-setting process, such as nuance and the peculiarities of agenda-setting at its different stages; awareness of the general issue; awareness of proposed solution and specific knowledge about the proposals (Benton & Frazier, 1976). Additionally, scholars learned of the inclusion of elements of public decision-making in deciding what to accept as the public agenda-setting factors, such as amount of exposure and audience's personal characteristics and background becoming important (McCombs and Shaw, 1978).

However, the main role in providing the choices still belongs to news media. Their power remains undeniable for agenda-setting scholars: "the press is far more than a conduit for the concerns and issues of others… it reworks and retranslates them. The mass media both focus attention and structure our cognitions" (McCombs & Shaw, 1978, p. 151). McCombs and others expanded on the role of the audience in the agenda-setting process. They attempted to integrate some media gratification studies into their theoretical framework, showing a connection between different information seeking motives and resulting differences in agenda-setting effects (McCombs & Weaver, 1985). And while real world events, and politicians may take part in forming news agendas, and publics may get to choose which ideas to subscribe to, news media have the last word in selecting what is to be disseminated to their audiences (McCombs, 2004).

Concurrently with the development of agenda-setting theories, more groundbreaking research was being carried out on the process of political agenda building. In a different subfield of social science, from a different perspective, Cobb and Elder (1971) used the term "agenda-building" to describe the interplay of government, news media, and publics in the process of

political agenda formation. A more complex set of assumptions incorporating the idea of reciprocity, as opposed to a unidirectional influence of news media over their audiences, began taking shape. Cobb and his colleagues (R. Cobb, Ross, & Ross, 1976) went so far as to describe different types of political agendas (public agenda and official agenda) and speculated about the influence of reciprocity among the agenda's on political climate. If an issue has reached a certain level of development in the public agenda, and has not yet made its way to the official agenda, one should expect a good amount of dissatisfaction among the publics, they suggested.

In the absence of empirical data to back it up and with no clear statements of causal relationships, agenda building is not necessarily a theory that could be used to frame the research for this dissertation. However, the idea of reciprocity of agendas, which supports the main assumptions of agenda building, provides a basis for possible explanation of the connection between think tanks and national news agendas and their combined (and/or mutually reinforced) impact on U.S. foreign policy.

In fact agenda-setting research in U.S. foreign policy has assumed, and found evidence of, the possibility that participants other than news media could become active agenda setters. Though the first systematic explorations of foreign policy agenda-setting (Wood & Peake, 1998) did not yield much evidence of reciprocity between media and presidential agendas (while providing more evidence of news agenda's ability to influence issue salience), later research found that, under certain circumstances, other players could affect news media attention. So, for example, Edwards and Wood (1999, p. 342), while showing that "…most of the time presidents react, responding primarily to fluctuations in attention by the media and, in the area of foreign policy, world events," they also found evidence that "If an issue is not already part of ongoing media coverage or congressional hearings, then the president may be able to set the agenda of the

networks and Congress." Peake (2001, p. 83) showed that "…the President substantially impacts media and congressional attention to foreign policy issues" on issues enjoying relatively low levels of salience. When it comes to defense issues, number of congressional hearings on a topic seem to affect the amount of news coverage they get, while agendas of these two active agenda setters appear to be reciprocal on international relations issues (Tan & Weaver, 2007). While it is likely that salience of international affairs issues in congressional hearings is highly affected by the amount of attention the president pays to them (Rutledge & Larsen Price, 2014), the foreign policy agenda-setting scene displays several distinctive characteristics that informed the hypotheses of this research and informed the elaborated the possible role of think tanks in foreign policy agenda-setting and research needed to clarify that role. First, agenda-setting in foreign policy is not always unidirectional: depending on issue salience and its nature, different players may have better chances at affecting agendas of others. Second, reciprocal relationships between agendas of individual players take place in foreign policy agenda-setting. And third, foreign policy agenda-setting could work as in a multi-step process, which is important in understanding the ways in which think tanks could be affecting policymakers.

Levels of agenda-setting effects

It is important to note that, since its conception in 1972, agenda-setting theory grew to include a variety of effects and developed explanations (and tests) for effects at multiple levels. Object agenda-setting and attribute agenda-setting, the first two most researched levels, are what agenda-setting research normally deals with.

At the first levels of agenda-setting, salience of issues (or, in McCombs' terms, objects) is transferred from the mass media to the public, or in our case, hypothetically, onto think tanks:

"The object is that thing towards which our attention is directed or the thing about which we have an attitude or opinion" (McCombs, 2004, pp. 69-70). As such, this research uses countries – possible foci of foreign policy effort and think tank interest. Even though traditionally public issues have been used to test agenda-setting theory, virtually anything can serve as an object of attention, and foreign nations have successfully been used as a unit of analysis to test agenda-setting effects of international news (Wanta et al., 2004).

Second-level, or attribute, agenda-setting is an expansion of the understating of media agenda-setting effects. As McCombs (2004, p. 71) wrote, when the salience of object attributes are transferred from the media agenda "…the media not only tell us what to think about, but they also tell us how to think about some objects." While attribute agenda-setting deals with deeper levels of influence and is closely connected with the concept of framing, it is important not to confuse the two notions. To put it in McCombs' (2004, p. 88) language, "a frame is an attribute of the object under consideration because it describes the object. However, not all attributes are frames." A frame is a "very specific case of attributes" usually understood as a dominant perspective about an object (McCombs 2004, p. 88). Detection of the attribute agenda-setting effects on the foci of research and advocacy activities conducted by think tanks would indicate a very significant level of their dependence on news media in decision-making. However, object agenda-setting effects have to be found before one can talk about any connection.

Research hypotheses

Agenda-setting, at any level, states that there is a direct cause-and-effect relationship between the salience of objects (or attributes) in news media coverage and on public agendas. In order to show such a relationship, research results have to show a significant level of correlation

between the cause and the effect, while the cause must precede the effect in time. These conditions were applied to the test of causal relationships between news coverage and content published by think tanks online.

Additionally, considering current foreign policy agenda-setting literature, this research is looking for bi-directional relationships. Causality was assumed to have been reversed for topics of relatively low salience and think tanks were assumed to be active agenda setters. If the connection between media and think tank content is established, the causality will be tested in both directions.

H1. There is a positive correlation between the salience of selected countries in *The New York Times* and *The Washington Post* news coverage and salience of these countries in the content published on websites of leading think foreign policy tanks.

H2. News media coverage leads the attention of think tanks to more salient countries.

H3. For countries less salient in news coverage, attention to them from think tanks leads news coverage.

Using time series analysis techniques described in next chapter, this dissertation tests these hypotheses in an attempt to determine the presence and direction of agenda-setting effects between news media and U.S. foreign policy think tanks, and to address the two major objectives of this dissertation: explore a new field of media effects and open a new chapter in the exploration of foreign policy agenda-setting research by adding think tanks to the classic set of influential entities in the process.

Chapter 4.
Methodology

This chapter describes the approach to data and analysis in this dissertation's research. It begins by addressing the definition and measurement of the critical variable for the agenda-setting research, salience. Multiple approaches address the question differently, depending on research questions, groups compared in particular studies, as well the researcher's understanding of agenda-setting as a phenomenon. It explains the selection of the unit of analysis and the organizations relevant to this exploratory study. While the research deals with written sources of different type across the content published by think tanks online (commentary, research papers, reports, events descriptions, etc.) and news coverage (news stories, editorials, blog entries), content was not further parceled out, as structural elements of publication units differ greatly. Measures were taken to increase the likelihood of detecting thought relationships between the content published online by think tanks and news coverage. More influential think tanks were chosen for the analysis. The period where their influence is more likely to occur was considered. News organizations likely to lead national agenda were analyzed and objects likely to propagate the national news agenda were chosen for the analysis. Corresponding subsections explain the thinking behind this selection process in more detail. Lastly, the chapter describes the approach to data, which was treated as times series. Its analysis took into account the possibility of autocorrelation in times series variables.

Salience measurement

The measurement of salience of objects in news coverage (regularly, the main independent variable in agenda-setting research) and their attributes is essential for agenda-

setting research (McCombs, 2005). Gauging salience traditionally has been achieved by means of determining the number of stories about the objects of study[23] over time (Dearing, 1996; Rogers, Dearing, & Bregman, 1993). Often, more data is recorded and analyzed in these studies to provide additional information about different aspects of agenda-setting and/or related phenomena. While the exact understanding of salience as a concept varies in academic literature, the term is often synonymous with importance, popularity, concern, awareness, attention. It is sometimes associated with interest, relevance, awareness, conspicuousness, and involvement (Kiousis, 2004). The amount of recorded detail about stories and mentions of objects varies depending on research goals. The conceptual framework employed in a particular study ranges from a simple count (where all news stories, editorial pieces or blog entries in print media, or all segments in broadcast, mentioning the object[24] are equally counted and added up) to more complex procedures, where the amount of attention paid to the object within a story/broadcast segment is measured and recorded, along with the prominence of the story – gauged sometimes by its length and position in a print issue or broadcast[25] (McCombs & Shaw, 1993). Because salience, a crucial concept in research, has a wide spectrum of interpretations, it is important to define salience as it is understood in this study.

Developed by Spiro Kiousis (2004), the conceptual model of media salience organizes its measurements into three core structural elements of the salience phenomenon: attention, prominence, and valence. *Attention* to objects, the most common approach to measuring their

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[23] More generally, objects, in McCombs' terms.

[24] Or an attribute of an object, if second-level agenda-setting effects are being studied.

[25] The original agenda-setting study (McCombs & Shaw, 1972) divided the analyzed news media content into "major" and "minor" levels based on position and space devoted to printed news stories and position and time allowed for broadcast materials.

salience, is "usually gauged by the sheer volume of stories or space dedicated to topics…" (Kiousis, 2004, p. 74). The basic approach to gauging this volume, where "the number of news stories [mentioning the object] measures the relative salience of an issue of study on the media agenda" (Dearing, 1996, p. 18), has been, Kiousis argues, implemented by most scholars.

Prominence, described as "the positioning of a story within a media text to communicate its importance" (Kiousis, 2004, p. 74) is extrapolated from the presence of issue on front pages of newspapers (also in the beginning of news sections in magazines or in lead editorial columns in editorial pages)[26], and its mention in a "prestigious news source" (Kiousis, 2004, p. 75). Due to their "elite" status and ability to affect agendas of "non-elite media," use of *The New York Times* and *The Washington Post* as go-to sources for measurement of salience of objects in national news coverage, Kiousis argues, is rooted in the idea of prominence, which "… enhance[s] generalizability of using data from these [*The New York Time*s and *The Washington Post*] news outlets" (Kiousis, 2004, p. 75).

Valence, an "affective element of news" (Kiousis, 2004, p. 75), is measured by estimating the amount of conflict in a story (the more conflict, the higher the salience) and looking at the story's tone[27]. Though included in Kiousis' model and used by other researchers in measurements of salience in studies of first-level agenda-setting effects[28] (Mutz, 1998), concepts

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[26] This is essentially what McCombs and Shaw (1972) did in their foundational agenda-setting research. They, however, used length of television stories to assign them into the same "major" coverage category as the prominent print stories and editorials. Length of a television news segment is, in Kiousis' conceptual model, a potential characteristic of attention, not prominence. Before outlining the elements of his conceptual model, Kiousis (2004, p. 74) warns the reader that "… there is certainly overlap" and that the three indicators of salience in his model (attention, pominece and valience) are not nesessarrily "distinclty separate."

[27] Two main approaches to estimating the contribution of the story tone to its salience suggest either counting all non-neutral (either positive or negative stories) as salient or counting negative stories only (Kiousis, 2004).

[28] Media telling public *what* to think *about.*

united under the valence umbrella (such as positive or negative tone, coverage of sides in a conflict) are traditionally associated with the research on second-level[29] agenda-setting (McCombs, 2004) and framing (Scheufele & Tewksbury, 2007) studies.

While Kiousis argues that all three types of measures (attention, prominence, and valence) are important for an accurate measurement of salience, his own exploratory empirical tests did not include indicators for all three[30]. Although the factor analysis in his study showed valence measures explaining 28% of variance in the sample, some of this explanatory power overlapped with the visibility factor[31]. Explanatory power (53% of variance) of the visibility factor and the overlap of valence factor dimensions with the former, prompted Kiousis to conclude that "conventional use of story frequency to represent media salience has been generally appropriate" (Kiousis, 2004, p. 81).

While the measurements for valence as a contributor to media salience have not been fully developed (Kiousis, 2004), more tests are also needed to establish their impact on salience. There is no substantive reason to suggest that valence indicators (if found at all[32]) would contribute to the measurement of object salience in think tank publications. While prominence of an object in news coverage could be assessed from its position in a publication, volume of the story or length of a broadcast segment, the same may not apply to the content produced by think

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[29] Media telling people *what* to think.

[30] He gathered news stories from *The New York Times* coverage, which limited the sample to prominent (at least according to one or prominence criteria) content only.

[31] Kiousis mentions that Manheim (1986) "collapsed attention and prominence into the category of visibility" (Kiousis, 2004, p. 74), and uses the term "visibility" to label a factor, uniting attention and some prominence indicators.

[32] While think tanks have generation of "policy-oriented research, analysis, and advice" (McGann, 2010b, p. 1) as their mission, output they publish on their websites is expected to be neutral in tone. Objectivity requirement of scientific inquiries (Reiss & Sprenger, 2014) leaves very little room in research-based publications for negative or positive incarnations in tone, as well as conflict, as understood in news reporting.

tanks. Considering Kiousis' assessment of story frequencies as an appropriate measure of salience, this dissertation's main emphasis on attention to objects and the need to collect comparable data from both news media and think tanks, valence and prominence indicators were not included in salience measurements. Salience of objects was represented by the number of stories, blog entries, and editorial pieces mentioning them in news coverage and by the number of published online analysis pieces, activities, reports, and other content for think tanks.

Unit of analysis

Print newspaper content (news stories, editorial and op-ed pieces) and web-based publications (pieces appearing on news media websites only) were treated equally in the assessment of object salience in news coverage. Considering the important role blogs have in setting news-agenda (Campbell, Gibson, Gunter, & Touri, 2009) and direct association of media-sponsored blogs with respective news organizations (i.e. www.blogs.nytimes.com, http://www.washingtonpost.com/blogs), blog entries mentioning the object were counted in measuring its salience as well. A single publication (news story, editorial, blog entry) was treated as a unit of analysis.

According to Abelson (2012b, p. 2), "regardless of how different types and generations of think tanks promote themselves, they understand all too well the importance of building a public profile." In their effort to establish their public profile, think tanks, along with other activities[33], post key information about their work online. Like other institutions, *Carnegie Endowment for*

[33] According to Abelson, in pursuit of a stronger public profile, think tanks also organize forums, encourage their fellows to give public lectures, testify before Congress, publish books, journals and reports, and enhance their media exposure. They keep record of these activities and post online written content, transcripts and descriptions of events.

International Peace and *Brookings Institution* place on their websites reports, research notes, policy recommendations, opinion and editorial pieces, interviews, testimonies, lectures, and other proof of their work. While important as an illustration of their productivity and as a tool of increasing media exposure (Abelson, 2012b), the diverse published online content serves as a good indicator of the agendas of think tanks. Similar to the way in which it was measured in news agenda, salience was determined as the number of pieces published online mentioning the object. While prominence measures were not included in this study[34], all website publications had equal weight in the salience rate of an object.

Leading think tanks

A variety of organizations, including think tanks themselves and the Civil Societies Program at the University of Pennsylvania, rank think tanks and keep track of their performance. Selection of the think tanks for the dissertation research was based on their prominence in the field of U.S. foreign policy. The Brookings Institution and the Carnegie Endowment for International Peace were selected for their top ranking in the Think Tanks & Civil Societies Program's 2014 Global Go To Think Tank Index Report (McGann, 2015). The report suggests they are the most influential in U.S. foreign policy think tanks.

Brookings Institution describes itself as "a nonprofit public policy organization based in Washington, DC" with a mission to "…conduct high-quality, independent research and, based on that research, to provide innovative, practical recommendations…" (Brookings Institution, n.d.-a). The organization was recognized as the top think tank in the world by the above mentioned

[34] See previous section of this chapter

Think tanks & Civil Society program in seven consecutive annual reports between 2008 and 2015 (McGann, 2008, 2009, 2010a, 2011a, 2012, 2014, 2015) and named among 30 (alphabetically arranged) top think tanks in the world in the very first 2007 Go to Think Tanks Report (McGann, 2007). Since the introduction in 2013 report of the Foreign Policy and International Affairs category, Brookings Institution has held the top position in in it (McGann, 2014, 2015).

The Carnegie Endowment for International Peace (CE) is a "unique global network of policy research centers" aimed "to advance the cause of peace through analysis and development of fresh policy ideas and direct engagement and collaboration with decisionmakers in government, business, and civil society" (Carnegie Endowment for International Peace, n.d.-a). CE was the second ranked foreign policy and international affairs think tank in 2013 Got to Think Tanks report (McGann, 2014) and third in the latest 2014 report (McGann, 2015).

Unlike the case of the national news agenda, there is no substantive reason to assume that a shared think tank agenda exists. Thus the content of each think tank was coded into separate variables and treated as individual time series.

Leading news media and the national news agenda

While a multitude of factors affect formation agendas of individual news outlets, determining (McCombs, 2004) and even predicting (Atkinson, Lovett, & Baumgartner, 2014) a universal national news agenda is possible from relatively small samples. McCombs (2004, p. 113) argued that certain "elite" media set the tone for other news outlets, in what he called the "intermedia agenda-setting" process and contemporary research finds more support for his argument (B. E. Denham, 2014; Golan, 2006). *The Washington Post* and *The New York Times*

are often considered as such elite intermedia agenda-setters, which is why they have been selected for this study. As Kiousis (2004) argues, one can reliably sample these news outlets in a measurement of national news agenda. However, intermedia agenda-setting is not the only determinant of national news agenda[35]. Regardless of particular conditions making the existence of a national news agenda possible, there are regularities in news coverage by individual outlets that hint at the existence of the national news agenda.

Selecting objects potentially representative of national news agenda

Recent research illustrates that, in certain cases, using only a few (or even a single) news organizations' coverage to assess salience of objects on national news agenda is justified (Atkinson et al., 2014). According to the findings from Atkinson et al. study, as long as an object is highly salient and experiences a spike in attention in one national news source, it is very likely to do so in the rest. Salience in this study was understood as "the number of monthly news articles" (Atkinson et al., 2014, p. 272) and the attention spike was defined as "as the difference between the maximum value [monthly count of stories] and the mean [over the test period], divided by the mean." In order to improve the representativeness of the national news agenda by the coverage from *The New York Times* (NYT) and *The Washington Post* (WP), highly salient objects, and objects experiencing spikes were selected for analysis.

Such objects were first identified in NYT coverage using the LexisNexis search engine over 12 months of 2011 – the beginning of the research time period (see justification of the

[35] According to McCombs (2004), beside other news organizations, journalism's norms and traditions, major sources of information have major impacts on formation of national news agenda, with national leaders and public relations professionals contributing to the process as well.

period in the next section of this chapter). According to McCombs (2004, p. 69), an object is "that thing towards which our attention is directed" and "the kinds of objects that can define an agenda in the media and among the public are virtually limitless" (McCombs 2004, p. 70). This dissertation uses countries as objects of attention. The initial set of keywords for news content searches was based on the United Nations geographical regions and their composition (Division, 2013). Searches were conducted using 238 country names and major capitals, sometimes used as synonyms for some countries' governments (i.e. Official Moscow).

Searches for several objects produced very high numbers of false hits that did not mention target countries. A more complex search logic was applied in these cases to ensure clarity, so, for example, if one searched for "Georgia," stories related to the country in the Caucasus and not the American state would be counted. The false hit stories were analyzed in order to determine search words to be excluded from LexisNexis search terms[36]. Similarly, "Jordan" could refer to a country but is also commonly used as a name. Some countries (like Guinea-Bissau, French Guiana, Papua New Guinea, Equatorial Guinea, and Guinea) had elements (or the entirety) of another country's name in their designation, which required specifications in search terms[37] as well[38].

Searches in *The New York Times'* coverage for 25[39] out of 238 countries and territories in the initial list generated more than 1000 hits, indicating these countries as more salient (and thus

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[36] In the example of Georgia, the search term ended up excluding major cities in Georgia, USA, as well as popular in the U.S. sports: Georgia or Yerevan or Saakashvili AND NOT Atlanta AND NOT Savanna AND NOT Augusta AND NOT Marietta AND NOT Columbus AND NOT football AND NOT basketball AND NOT baseball.

[37] For complete list of search terms refer to Appendix A

[38] For example, Guinea, the country, had to be distinguished by means of excluding exact names of another four states from the search term: Guinea AND NOT "Guinea-Bissau" AND NOT "French Guiana" AND NOT "Papua New Guinea" AND NOT "Equatorial Guinea"

[39] See Appendix B.

more likely to be found on national news agenda) objects. Atkinson et al. (2014, p. 374) found that two factors explain approximately 90 percent of a topic's likelihood to become a part of national news agenda: salience and "attention spikes." The strength of attention spikes was estimated for the coverage of the 25 salient objects, which narrowed the list to 5 countries: Egypt, Turkey, Pakistan, Libya, Greece, and Japan had a spike in attention higher than .8[40]. Japan, the object with the 6th largest spike, was added the list as well, while experiencing a smaller spike of .69, had salience higher than that of the first 5 high-spike countries.

An attention spike represents a singular noticeable increase in coverage, followed by a drop, within a short period of time. If multiple spikes occur during a prolonged period, the individual spike's strength would be reduced by the fact that each of the spikes would affect the average salience and thus minimize the difference between the maximum number of stories in a month and the average.

In the hypothetical situation in Table 1, country A and country B follow the same pattern in coverage, except for the fact that country A experienced one spike in attention in news coverage and country B had two, and country C experienced a prolonged increase in attention. While country B went through attention spikes as high as the one country A had, its spike value [(max - mean)/mean] is lower. Country C has the highest of the three in salience and the increase in attention to it is obvious. However, its spike value is the lowest.

[40] Among the 25 more salient countries, spike values ranged from 0.21 for Mexico to 1.34 for Egypt. See Appendix C for the full list.

Table 1. Hypothetical illustration of lower detectability of multiple spikes or gradual increases in attention.

Country / Coverage month	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Salience** (monthly average)	**Spike**	**Relative standard deviation**
A	8	8	7	6	25	5	6	9	1.69	75.57
B	8	8	25	6	25	5	6	12	1.11	76.28
C	8	12	16	20	24	28	24	19	0.48	38.17

The attention spike measure, due to its mathematical nature, only accounts for a singular strong increase in attention over analyzed period (Atkinson et al., 2014, p. 372). Accordingly, additional measures were introduced to include research objects with multiple attention spikes.

Standard deviation (or average distance of individual data points from the mean) could serve as a good indicator of multiple attention spikes. However, due to significant differences between average monthly numbers of hits among searches for various countries, within the selected group of 25 most salient (950 for UK on one end and 86 for Hong Kong on the other), standard deviations expressed in absolute values would be incomparable. Relative standard deviation proved a more suitable coefficient of variation in this case. In the hypothetical situation depicted in Table 1, country B has two significant spikes. Its spike value is lower than that of country A (which only has one spike), however, its relative standard deviation value is higher.

In our subsample of 25 most salient countries, five countries with the highest attention spikes also had the highest relative standard deviation (RSD) values. Iran, India, and Syria had higher RSD values than Japan, which was included into the sample based on its higher salience and higher attention spike. Among these three countries, Syria had a relatively low salience value of 100 (third from the bottom of the top 25 most salient), while Iran and India had salience levels

(130 and 231 respectively) closer to the six countries already included in the sample. Based on their high RSD values and their higher salience, Iran and India were also included for analysis.

The combination of three two criteria, salience, attention spikes, and the added variability measure produced a sample of 8 countries leaving out the United Kingdom and France, the two most salient in the group of 238 countries objects in *The New York Times* coverage. The two countries enjoyed noticeably higher levels of attention (950 and 737 average monthly references in *The New York Times* converge, compared to other 23 countries, on average mentioned 213 times a month). They also seemed to have gone through longer, periods of increasing and decreasing salience. The high levels of salience for these countries, as well their tendency to attract increased media attention over the period, make them appropriate for testing another scenario of the dependence between news coverage and agendas of think tanks where a spike a substituted with a steady growth of attention.

After measures were taken to increase the representativeness of the national news agenda by the data from the two elite newspapers, data on their attention to selected objects was aggregated into a single variable by means of addition.

Time period and intervals

As Abelson (1995) pointed out, “think tanks appear to make the greatest contribution to the development and refinement of ideas during presidential elections” (Competing in the Marketplace of Ideas section, para. 3) when advice from think tanks is in higher demand. It made sense to choose presidential elections as the mainstay for the time period, since the president has been traditionally considered the key figure in foreign policy (Hicks, 1996; Jody, 1983; Mangi, 1994; Mulcahy, 1987). Searches for the 10 likely to be found in national news agenda objects in

The New York Times and *The Washington Post* coverage and think tank online content were conducted on a weekly basis and included 104 full weeks between Monday, January 3, 2011 and Sunday, December 30, 2012, time preceding, during and after the elections.

In a preliminary analysis of data collected for object selection (from *The Ney York Times* coverage and corresponding months of think tank online content), some of the countries experienced spikes in attention in NYT, Brookings Institution, and Carnegie Endowment for International Piece during the same months. In order to detect the time lag between spikes of attention to a country in different sources, data had to be collected on weekly basis.

A week was understood as a seven-day period, starting on Monday and ending on Sunday. Such parameters link the more extensive Sunday editions of *The Washington Post* and *The New York Times* (the latter is supplemented by *The Week in Review*, a summary section of proceeding coverage) with related coverage of the preceding week.

Three measures – the period choice, choice of prominent (or elite) news outlets, and the selection of objects likely present on national news agenda – were meant to increase the likelihood of detecting a relationship between news agenda and the foci of think tanks.

Variables and data analysis

A variety of statistical tests have been employed by agenda-setting scholars. Researchers have used Pearson correlations (Golan, 2006; McCombs & Shaw, 1972), multiple regression analyses (Cook et al., 1983; Jacobs & Page, 2005; D. Weaver, 1991), Box-Tiao impact assessment techniques (Peake & Eshbaugh-Soha, 2008), vector autoregressive (VAR) techniques (Edwards & Wood, 1999; Peake, 2001; Rutledge & Larsen Price, 2014; Tan & Weaver, 2007;

Wood & Peake, 1998), autoregressive distributed lag (ADL) model (Soroka, 2003), and, in a recent McCombs' piece, social network analysis (Vu, Guo, & McCombs, 2014).

Some of the techniques deal with time series specifically in order to track the effects of past and concurrent values of independent variables onto dependent variables. The communication process is dynamic in nature, thus it is important to treat it as a process and track changes in indicators over time. Time series analyses are the best available statistical tools for such analysis (Yanovitzky & VanLear, 2008). Many conventional statistical methods traditionally used in mass communication research[41] depend on the assumption that observations in analyzed datasets are independent. This ensures random the nature of errors (or normality of distribution). Sampling adjacent in time points introduces additional correlations (or autocorrelations) to the analysis, therefore restricting the use of these traditional statistical methods[42] on time series data (Yanovitzky & VanLear, 2008). Besides accounting for autocorrelation, time series statistical models are appropriate for agenda-setting research due to their ability to (1) indicate temporal order between variables, (2) detect presence of lagged (not instantaneous) effects (Yanovitzky & VanLear, 2008). While able to estimate strength of correlations between variables as well as their temporal order, time series modeling allows researchers to test both conditions of agenda-setting (correlation between agenda and emergence of objects on influencing agenda before influenced) simultaneously, while estimating the time it takes for agenda-setting effects to occur.

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[41] Such as Pearson Correlations in some of the above mentioned examples.

[42] Used in some of the examples of agenda-setting research mentioned at the beginning of this section, multiple regressions could produce biased results, if auto correlations (within variable, like often happens in time series) are present in the dataset.

Autoregressive integrated moving average (ARIMA), a classic time series analysis method, was used to prewhiten (remove autocorrelation from) both dependent and independent variables. The research employed the “equal footing” approach (Chatfield, 2004, p. 155) and fitted each times series to a first-order autoregressive ARIMA (1,0,0) model with no trend or moving average components. Residuals generated in the process of model fitting were used in a Pearson correlation and cross-correlation analyses in order to detect overall and lagged (delayed in time) correlations between news agenda and the content published online by think tanks. Both the prewhitening of the time series and correlation analyses were carried out in IBM SPSS Statistics 22 Software.

Eliminating autocorrelations from all variables accounted for the foreign policy “issue inertia,” or determination of following attention from news media, president and Congress to an object by their previous attention to it (Edwards & Wood, 1999). This enabled concentration on relationships between variables not affected by their internal trends.

Chapter 5.
Findings

A total of 30 time series of search results for selected countries in news coverage and online content of the two selected think tanks, as well as correlations among the 30 times series, were analyzed. Three variables, (salience news coverage, attention in Brookings Institution's content, and attention in Carnegie Endowment's content) were created for each of the 10 likely to be found on national news agenda countries. For each country, indicators of object salience in *The Washington Post* and *The New York Times* coverage were aggregated (added) into a single news agenda variable. Attention to the objects in the Brookings Institution's (BI) and Carnegie Foundation's (CE) content were analyzed as separate variables. Each time series contained 104 data points, one for every full week (starting Monday and ending Sunday, per explanation in Chapter 4) of 2011 and 2012. A data point represents the number of results in a search for the particular country in online content of a think tank over a seven-day period or the sum of search results in *The Washington Post* and *The New York Times* over the same seven-day period.

The 30 time series were first prewhitened by means of fitting them to ARIMA (1,0,0) models and generating new variables from residual values (difference between the original and predicted by ARIMA model values). ARIMA, like other time series forecasting tools, generates values for a variable based on its intrinsic regularities, or autocorrelation. Elimination of such intrinsic rigidities is crucial for comparing time series to one another (Yanovitzky & VanLear, 2008). If not accounted for, autocorrelations affect between-series comparisons. Table 2 shows the difference in Pearson's correlation values between original and prewhitened time series.

Table 2. Pearson's correlations among prewhitened and original time series.

Country	News and Brookings correlation		News and Carnegie correlation	
	Prewhitened times series	Original data	Prewhitened times series	Original data
United Kingdom				
France		0.324		
Japan		0.211	0.415	0.454
India				
Egypt	0.438	0.67	0.535	0.712
Iran	0.478	0.516		0.213
Turkey			-0.243	
Libya	0.685	0.736	0.321	0.448
Pakistan	0.594	0.62	0.396	0.436
Greece	0.478	0.642	0.227	0.436

** Only correlations significant at 0.05 level and higher were reported in the table. Both variables in correlating pairs were either prewhitened or remained unchanged.*

As Table 2 illustrates, correlations between time series generally appear stronger when prewhitening is not introduced. Not-prewhitened data also shows correlations between the amount of attention to France and Japan in Brookings Institution's content and salience levels for these countries in news coverage as well as Iran's salience in news coverage and attention to it from the Carnegie Endowment. In these three cases, prewhitened data displayed no statistically significant connections. Both the stronger correlations and the presence of connections exclusively in not-prewhitened data are caused by autocorrelations. The example of Egypt in figures 1-3 below illustrates the strength of autocorrelation in news coverage, Brookings Institution's online content and Carnegie Endowment's online content.

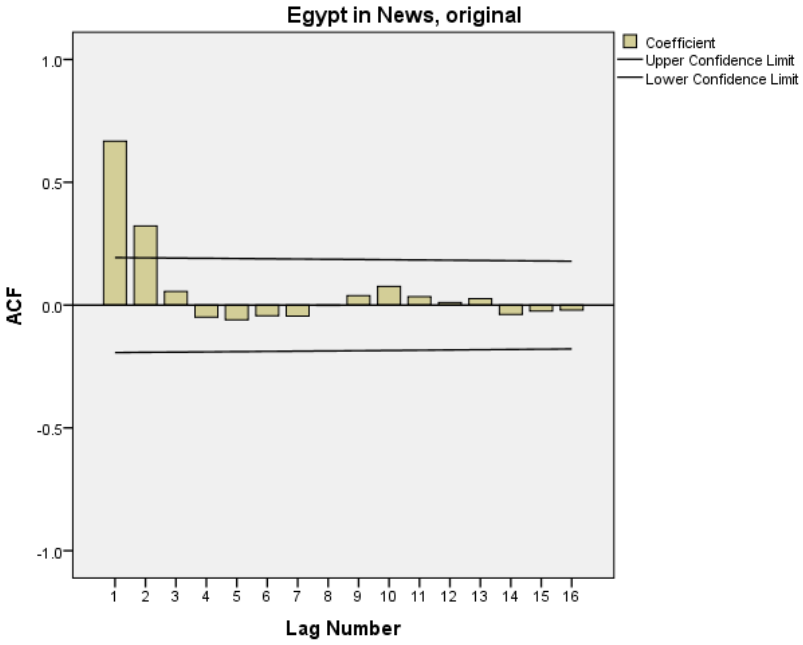

Figure 1. Autocorrelation in original time series of Egypt's salience in news coverage.

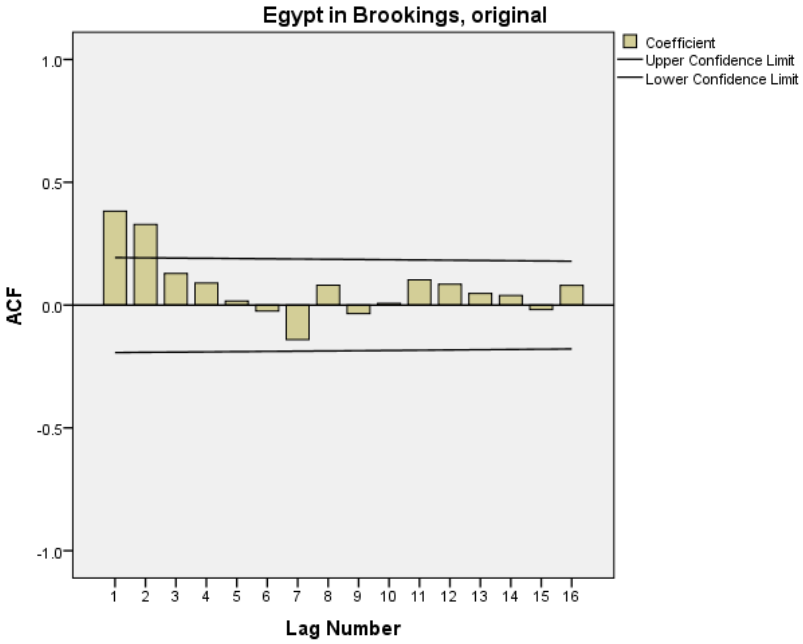

Figure 2. Autocorrelation in original time series of Egypt's salience in Brookings Institution's online content.

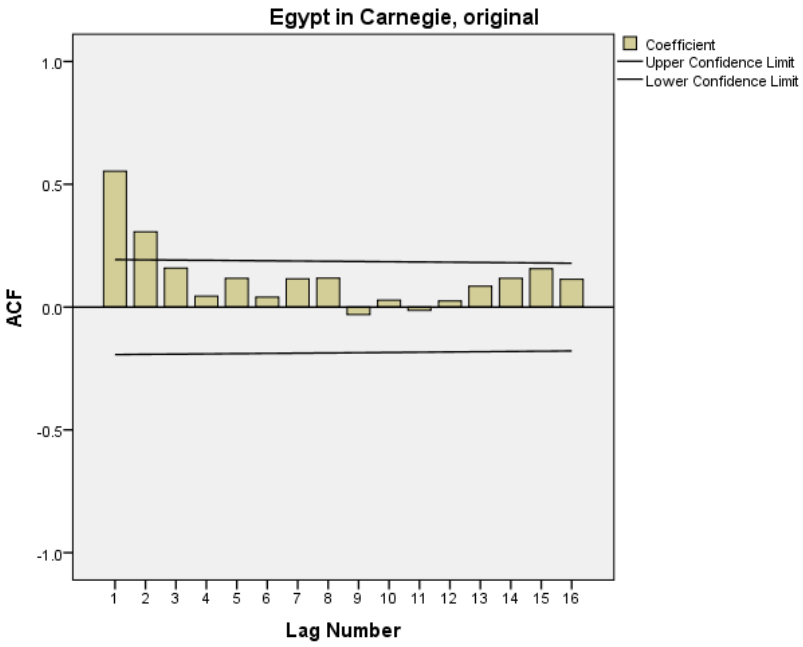

Figure 3. Autocorrelation in original time series of Egypt's salience in Carnegie Endowment's online content.

Autocorrelation of data two weeks back was present in all three variables for Egypt, accounting for 0.232 and 0.177 of difference in r values for Pearson's correlations between news and BI, news and CE respectively. Weaker autocorrelation levels in Pakistan variables (r=0.356 at lag 1 for news coverage and r=0.212 at lag 5 for CE) caused smaller increases in r values, 0.026 and 0.04, for Pearson's correlations between news and BI, news and CE respectively. While presence and strength of autocorrelations differed among the 30 time-series, variables showing higher levels of autocorrelation also displayed stronger between-variable correlations among original time series[43]. Prewhitening was meant to eliminate the autocorrelation effects and avoid cross-correlation bias (or overinflation of connections) among the variables of this

[43] Remaining autocorrelations are summarized in Appendix D.

study. While multiple aproaches to prewhitening are employed in social sciences (Yanovitzky & VanLear, 2008), all time series were treated equally for the following cross-correlation analyses, as hypothesized agenda-setting effects between news coverage and think tank online content were expected to go both directions, from news media to think tanks and vice versa.

Examination of cross-correlation analyses revealed a variety of relationships among prewhitened variables, showing that attention from individual think tanks to 7 out of 10 countries correlates with the salience of these countries on news agenda to some degree.

Results below are presented in the order of corresponding hypotheses.

H1. The first hypothesis, stating that salience of selected countries in news coverage positively correlates with attention to these countries in the content published by thinks tanks on their websites, was partially supported by the data. Salience of five countries, Egypt, Iran, Libya, Pakistan, and Greece, in news coverage correlated with the amount of attention to these countries in the Brookings Institute's output. Six countries, Japan, Egypt, Turkey, Libya, Pakistan, and Greece, enjoyed correlating amounts of attention in news coverage and in Carnegie Endowment content. All statistically significant correlations are highlighted in Table 3.

Countries in Table 3 are sorted according to their salience represented by the combined number of mentions found in *The New York Times* and *The Washington Post* over 104 weeks of the research period. R-values and p-values for Pearson correlations are presented in separate columns. N=104 for all variables.

Table 3. Salience of countries in news media and Pearson's correlations between their salience and attention to them in Brookings Institution's and Carnegie Endowment's online content.

Country	**Salience**	**News and Brookings correlation**		**News and Carnegie correlation**	
		r	p	r	p
United Kingdom	43973	0.066	0.505	0.073	0.461
France	28729	0.153	0.122	0.007	0.943
Japan	12805	0.181	0.067	0.415	<0.001
India	11201	0.084	0.397	-0.38	0.704
Egypt	9916	0.438	<0.001	0.535	<0.001
Iran	9320	0.478	<0.001	0.08	0.417
Turkey	7524	0.016	0.87	-0.243	0.013
Libya	7209	0.685	<0.001	0.321	0.001
Pakistan	6879	0.594	<0.001	0.396	<0.001
Greece	6331	0.478	<0.001	0.227	0.021

While Pearson's correlations presented in the table above are not necessarily indicative of a causal relationship between object salience in news coverage and attention to these objects from think tanks, the presence of strong correlations for some of the countries illustrates a connection between media and think tank attention. This satisfies the first condition of agenda-setting effects for some of the cases, requiring a significant level of relation between the cause (agenda-setter's attention to objects) and effect (change in affected agenda).

Cross-correlations between time series are indicative of lags (or time difference) in correlations – they provide information to satisfy (or reject) the second condition of agenda-setting effects, the cause must precede the effect. In cross-correlation analyses, carried out between pairs of time series, one time series is considered as leading the other if a statistically significant relationships between its lags (proceeding values) and following values in the second one are found (Yanovitzky & VanLear, 2008). Determining the leading time series is crucial for

the remaining two hypotheses of this research. Another potentially beneficial characteristic of this data analysis method lies in its ability to detect more correlations than a simple Pearson's test could do. Cross-correlation analysis compares both concurrent (like Pearson's correlation with non-lagged variables does) and lagged (or differing in time) values of time series. Essentially, the procedure creates multiple versions of the two time series it compares (lagged by zero to a virtually infinite number of time points) and administers parwise comparisons between the lagged version of one variable and fixed values of the other. As a result, multiple connections could be detected between two time series, thus informing our conclusions about the ability of the data to satisfy the first condition of agenda-setting.

India's salience in news coverage correlated with BI's content at lag 1 (r=0.271), suggesting a possibility for media effects in this case. While the Pearson's correlation tests did not reveal covariations between the country's news coverage and content about it published by think tanks on their websites, the relationship between the news coverage and Brookings Institution's content was present. United Kingdom and France, the two most salient in news coverage countries, just as they showed no correlation for concurrent news coverage and think tank content in Pearson's correlation tests, displayed no significant lagged relationships in cross-correlation analyses. The other seven countries, while exhibiting some level of covariation in the Pearson's correlation test, displayed some level of lagged correlation between news coverage and the content published by think tanks on their websites, while also showing correlation in concurrent attention from think tanks and salience in the news. Table 4 presents the number of significant correlations, including those at lag 0, between news coverage, BI's online content and CE's online content. Statistically significant cross-correlations are discussed in more detail in the following subsections as valuable in determining the direction of possible agenda-setting effects.

Table 4. Number of correlations at time lags 0- 7 between news coverage and content published by think tanks on their websites.

	Number of significant correlations	
Country	News and Brookings Institution	News and Carnegie Endowment
United Kingdom	0	0
France	0	0
Japan	0	2
India	1	0
Egypt	2	3
Iran	5	1
Turkey	2	2
Libya	2	3
Pakistan	1	2
Greece	2	2

For seven out of 10 countries, there is at least one statistically significant correlation between their salience in news coverage and attention to them in Brookings Institution's online content. Similarly, though with a different set of correlating countries, in seven out of 10 cases, there is a statistically significant correlation between news coverage and Carnegie Endowment's content. In summary, in 14 out of 20 possible pairs of potentially related times series (or in 70% of cases), at least one statistically significant correlation was observed, which partially supports the first hypothesis.

The fact that salience in the news and attention from think tanks did not correlate for all the cases suggests a situational nature of the possible agenda-setting effects between news media and think tanks. Depending on the direction of agenda-setting effects (from news media to think tanks or vice versa), the conditions enabling and determining the strength of agenda-setting may vary greatly, as think tanks and news media are driven by different goals and principles of

functioning. As suggested in the discussion, the nature of the events associated with increased attention to a country may serve as such a contributing factor, but other, less obvious explanations need to be considered and investigated.

It appears some of the factors determining the likelihood of a think tank basing its attention to a country on the salience of this country in the news could be universal for more than one case and organization while individual for particular organization causes might be at play. Among the ten countries in Table 4, salience of India only correlated with attention to the country from Brookings Institution's content, while only Carnegie Endowment's attention to Japan related to its news coverage, suggesting the presence of individual for think tanks determinants of attention.

The first hypothesis thus did not receive full support, which could mean that mechanisms other than the factors used for object selection (salience, attention spikes and possible multiple spikes) could be at play in determining the likelihood of object salience in news coverage propagating attention to from think tanks.

H2. Though preceding news coverage did affect the attention think tanks gave to some countries, the relative salience of these countries did not appear to be related to the direction of agenda-setting effects.

Not only was there no clear indication of the direction of agenda-setting effects after the autocorrelation effects were accounted for, there was no indication of any relationship between the attention to the more salient countries in news coverage and content published by think tanks online.

As seen in Table 3 of bivariate Pearson's correlations, of the four most salient in news coverage countries, UK, France, Japan, and India, only Japan's salience in news coverage correlated at a statistically significant level with the attention given to the country only from the Carnegie Endowment for International Peace. Both Brookings and Carnegie published comparable numbers of entries about Japan on their websites over the analyzed weeks of 2011 and 2012, 379 and 443 respectively. In both cases, the numbers were close to average among 10 analyzed countries (388 for BI and 415.2 for CE). According to their websites, both think tanks have experts specializing in East Asia and Japan. Additional data and analysis are necessary to explain why Carnegie's attention to the country appeared to follow Japan's salience in news coverage and Brookings did not. An institution's structural organization and level of centralization, as well as style of work of individual research fellows, may determine the publication schedule. These questions need to be addressed in future research in interviews with research fellows and administration.

As revealed by cross-correlation analysis, India's salience in news coverage correlated with the Brookings Institution's attention to the country at lag 1 ($r=0.271$), while displaying no connection with the Carnegie Endowment's online content. Unlike in the case of Japan, amounts of attention to India from Brookings and Carnegie differed (443 mentions or 14% more than average, and 323 mentions, or 22% less than average, respectively).While statistical analysis of the connection between overall attention to a country from think tanks and the likelihood of agenda-setting effects would not be relevant to the ten cases used in this study, such a factor would be worth investigating in follow-up research.

In his study of the ability of U.S. presidents to affect the agendas of the media and Congress, Peake (2001) found that news media led the foreign policy agenda on more salient

issues, but presidents were able to affect the attention of the Congress and of the media to less salient ones. It appears that salience of an object in news coverage may not be a deciding factor in its ability to propagate attention of think tanks. Hypothesis 2 of this study therefore is rejected as no evidence is found suggesting that news media are more likely to lead the attention think tanks pay to more salient in news coverage countries.

McCombs (2004, p. 117) suggested that, while multiple sources are shown to affect news media attention, including among other sources, national leaders, public relations professionals and public information officers, “all of these influence steams are filtered through the ground rules established by the norms of journalism, and they are very powerful filters.” Between the intrinsic filters and inter-media agenda-setting effects (where more prominent news sources usually greatly affect the agenda of less prominent ones) a great deal of extraneous influences gets filtered out from the news agenda. Similarly, intrinsic for think tanks norms may be contributing to the likelihood of various topics to penetrate their agenda. As examples of India and Japan in content from BI’s ad CE’s websites suggest, these norms could vary from organizations to organization. Further investigation into the existence of such norms and their potential ‘filtering ability’ in agenda-setting processes could be carried out through a combination of interviewing and content-analysis techniques.

Unlike the other three countries of higher news salience, Japan had a higher value of the attention spike indicator, while India was included based on relatively high salience and relative standard deviation, indicative of multiple (possibly smaller) attention spikes. It appears that intermedia agenda-setting catalysts, a combination of higher salience and attention spikes (Atkinson et al., 2014) may not be as reliable a predictor of object salience transfer between news media and think tanks either.

H3. It was hypothesized that for less salient countries covered in news reports, changes in attention to them in think tank content would precede changes in their salience in the news agenda. While the four less salient among the selected countries, Turkey, Libya, Pakistan, and Greece, enjoyed correlating amounts of attention in the content published by think tanks online and in news coverage, temporal order in between the two could be determined in cross-correlation analyses.

In each, news content time series was entered first. Statistically significant correlations in positive lags on charts below and tables found in Appendix C they are indicative of relationships between the proceeding news and following think tank content. Correlations in negative lags indicate the leading role of think tank content time series. Each lag represents one week difference between time series. Two cross correlations were generated for each country, one for each of the two analyzed think tanks, using the residual values of the ARIMA (1,0,0) model of their content and the residuals of modeled in the same way news coverage time series.

Starting with Greece, the least salient of the 10 selected countries, the first cross-correlation charts, Figure 4 and Figure 5, shows the opposite of the hypothesized relationship between salience of the country in news coverage and the attention it received in Brookings Institution's and Carnegie Endowment's online content. In both cases, news coverage time series appears to lead the think tank content time series.

As Figure 4 illustrates, statistically significant correlations between news coverage and BI content on Greece were found at positive lag 5 and in the unity time (lag 0), indicating a certain degree of co-variation between the two time series and suggesting a possibility, delayed by six weeks, effects of media salience on BI's attention to the country. Multiple reasons could account for such a delay and would need further investigation. A certain level of topic saturation

may need to be reached among research fellows or administration for them to take interest in such a topic, enough to start active research on the topic. Lower levels of familiarity with the topic among experts may delay their reaction while required research and review of information is carried out. Unavailability of a particular expert due to travel, workload elsewhere or other reasons could factor in as well and need to be investigated. Of course, a study examining statistically significant samples of correlations with different lags will need to be conducted.

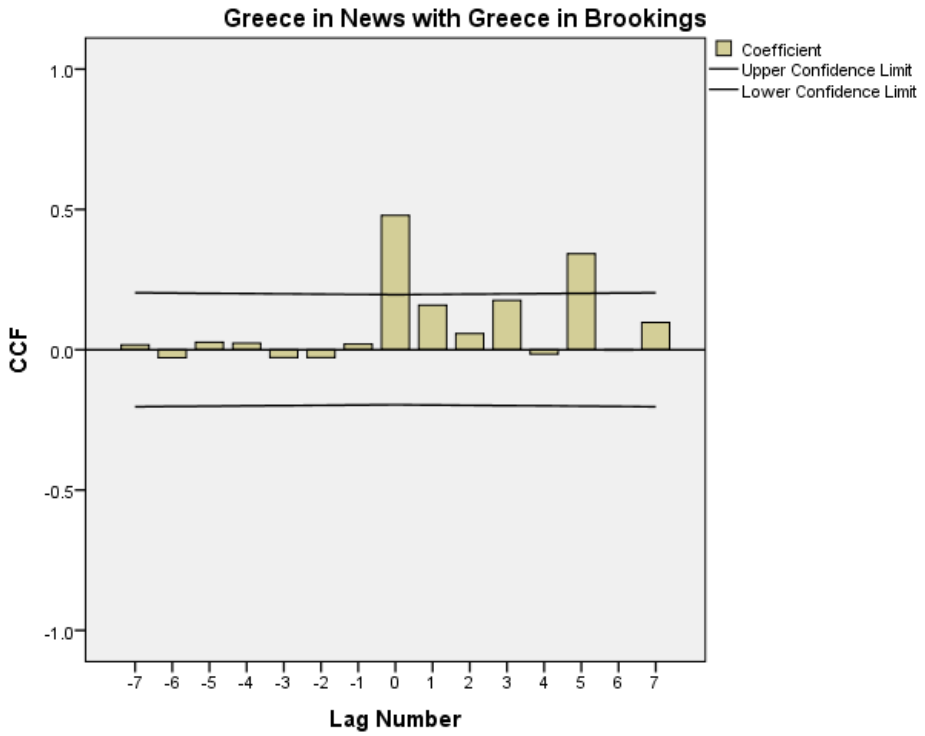

Figure 4. Cross-correlation between news coverage ARIMA residuals and Brookings Institution ARIMA residuals for Greece.

Similarly, as Figure 5 shows, news coverage of Greece correlates with the CE's attention to the country at unity time and at lag 1, with the lagged relationship appearing stronger than the correlation between same-week data points.

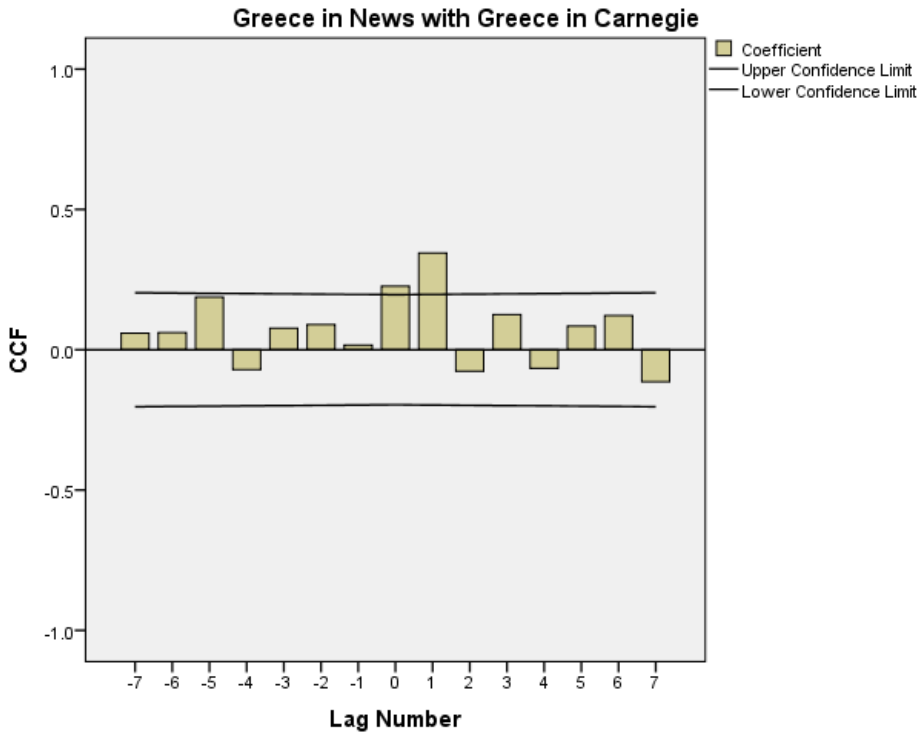

Figure 5. Cross-correlation between news coverage ARIMA residuals and Carnegie Endowment ARIMA residuals for Greece

While a strong (r=0.594) correlation was found between news coverage and BI content on Pakistan (Figure 6), cross-correlation analysis indicates changes in BI's attention to the country and its salience in news coverage were happening during the same weeks, suggesting the presence of covariation in two time series. Two potential explanations of such a phenomenon will require additional analysis. First, both Pakistan's salience in the news and attention to the

country from Brookings Institution could be simultaneously affected by extraneous factors, such as the agenda of policymakers, and major developments in the situation attracting attention of both the think tank and news media. News media could serve as a source of information about such factors for think tanks and thus still be a part of their foci formation. Another possible scenario is increased speed of reaction from think tanks, where the delay between increased news salience of an object and think tanks publishing more content about it is much shorter than a week.

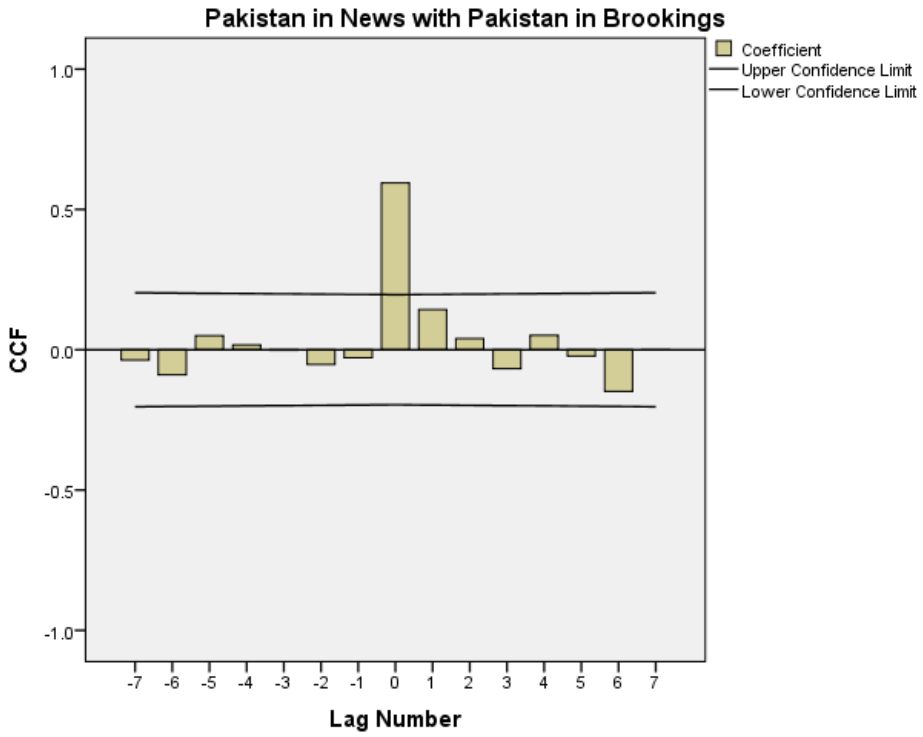

Figure 6. Cross-correlation between news coverage ARIMA residuals and Brookings Institution ARIMA residuals for Pakistan.

The anticipated in Hypothesis 3 relationship between preceding think tank attention to an object and the following change of its salience in news coverage was detected on the example of Pakistan in CE's content and the New York Times / Washington Post coverage. Correlation at lag -5 and at lag 0 in Figure 7 show that increases in attention to Pakistan in Carnegie Endowment's content proceeded spikes in its salience in news coverage by five weeks and coincided with those spikes. As a go to source for news media on political expertise on international issues (Abelson, 2009), think tanks could potentially lead the news agenda. The case of Pakistan and the Carnegie Endowment may illustrate just such a relationship.

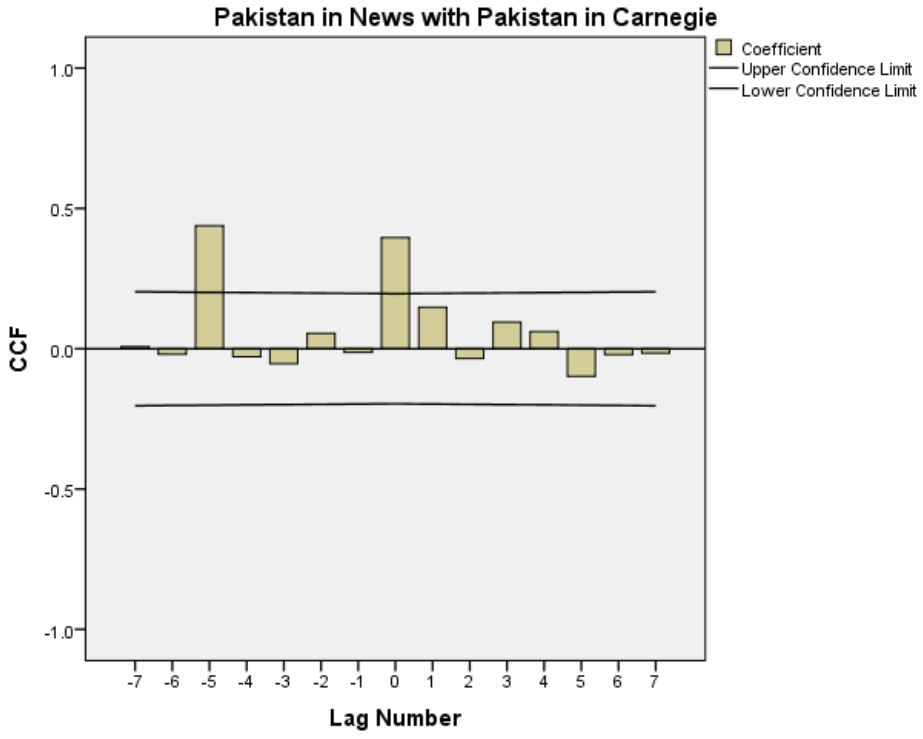

Figure 7. Cross-correlation between news coverage ARIMA residuals and Carnegie Endowment ARIMA residuals for Pakistan.

Salience of Libya in news coverage covariated strongly (r=0.685) with BI's attention to the country with the only significant correlation found at lag 0, and has preceded CE's attention by one week (r=0.225 at lag 1, r=0.321 at lag 0).

The case of Turkey, the fourth from the bottom of the "more salient" countries list, produced weaker (compared to other connections reviewed in this chapter) correlations at lag -7 (r=0.232) and lag 2 (r=0.219) in the cross-correlation between news coverage and BI's content, which did not illustrate a clear relationship between the two time series. There appeared to be a negative association for concurrent news coverage and CE content (r=-243 at lag 0), suggesting a possibility contrary to the agenda-setting relationship, where increased salience in news coverage (or factors causing the increase) could discourage a think tank from publishing as much content about the object as it has. The latter case revealed unanticipated direction on possible agenda-setting relationship between news media and think tanks.

While suggesting the possibility of think tank attention affecting salience of objects in news coverage (in case of CE and Pakistan), providing more illustration for possible media effects on think tanks (Greece in case of both think tanks, Libya in CE's online content), suggesting more complex cyclical relationships (remote mutual effects between news coverage of Turkey and BI's attention to it, negative relationship between Turkey's news coverage and CE's attention) data do not provide much support for Hypothesis 3. It does not appear that attention to less salient objects in news coverage is more likely to be affected by attention to these objects from think tanks.

Of the remaining countries (neither the four top salient nor the four least salient among the ten selected), Iran showed only one significant correlation (r=0.224) at lag 4 between news coverage and CE's content and revealed an interesting cyclical relationship between news and

BI's attention to the object. In Figure 8, significant positive correlations are found at lag -2 (r=0.239), lag 0 (r=0.478), lag 2 (r=0.377), and lag 6 (r=0.253), as well as weaker negative relationship at lag -1 (r=-0.214). While the relationships between preceding news coverage of Iran and following BI's attention to the country is stronger than the opposite, there appears to be reciprocity in the exchange of agendas here. Additionally, another instance of a negative correlation in this example is different from that in the case of Turkey and CE. Here we see preceding think tank content negatively correlating with new media coverage, suggesting that the previously observed case of negative correlation might be a part of a cyclical reciprocal relationship.

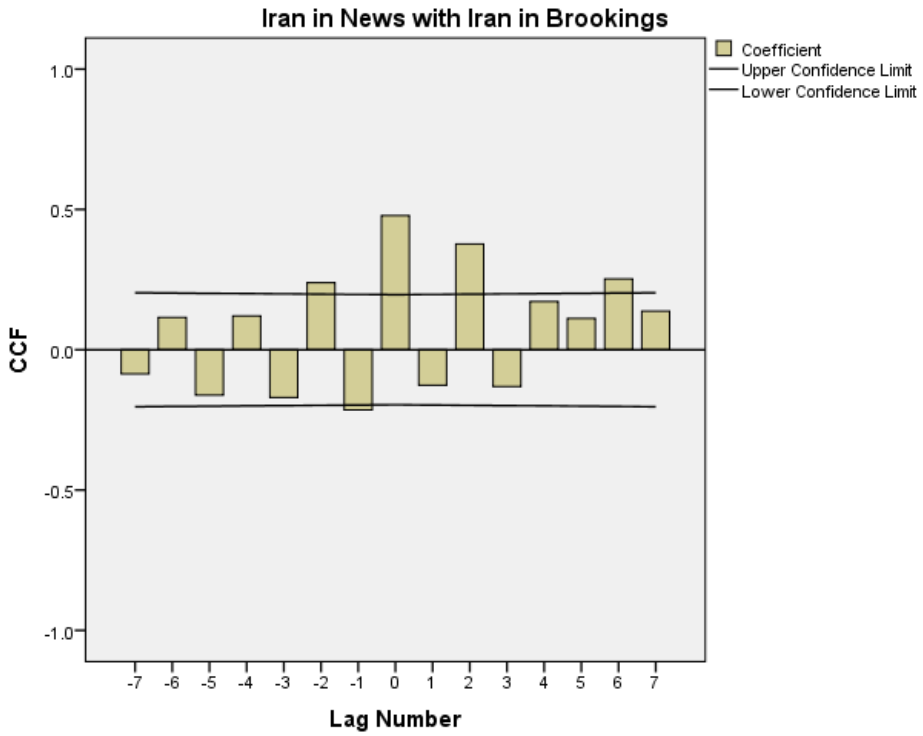

Figure 8. Cross-correlation between news coverage ARIMA residuals and Brookings Institution ARIMA residuals for Iran.

Represented in Figure 9, the case of Egypt provided more robust than other instances support for the possible media effects on think tanks attention. For BI's content, correlations with news coverage were found at lag 0 (r=0.438) and lag 1 (r=0.303). The relationship between CE and the news media (Figure 9) showed a gradually weakening temporal relationship with significant correlations found at lag 0 (0.535), lag 1 (r=0.445), and lag 2 (r=0.241).

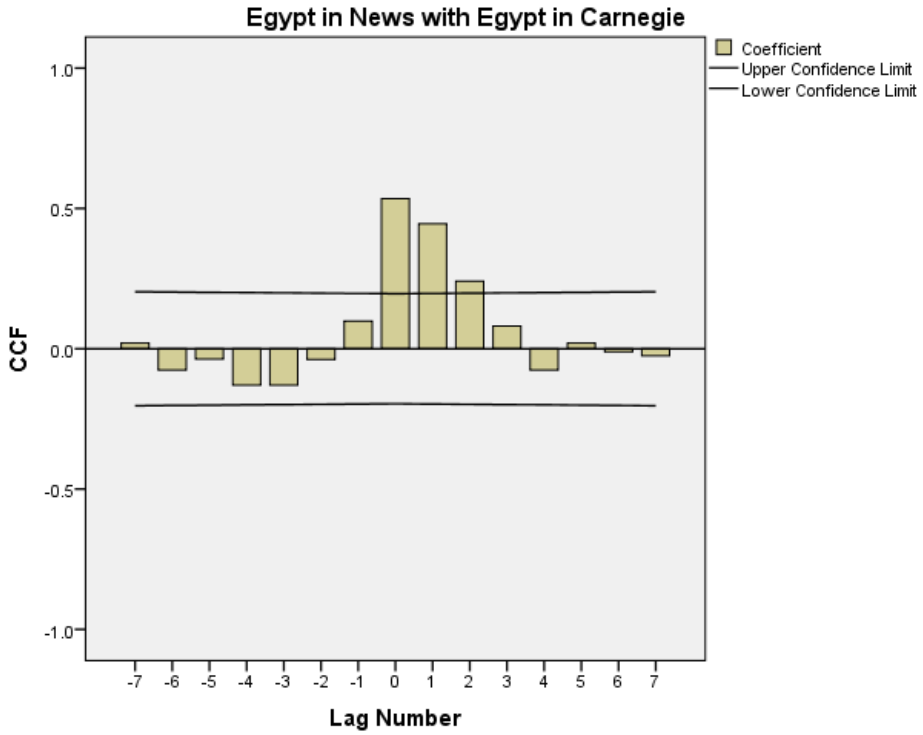

Figure 9. Cross-correlation between news coverage ARIMA residuals and Carnegie Endowment ARIMA residuals for Egypt.

Chapter 6.
Discussion and Conclusion

U.S. foreign policy affects not only the lives of American citizens, but the development and promotion of democracy in foreign nations (Finkel et al., 2007). A number of forces (Baum & Potter, 2008; Peake, 2001; Peake & Eshbaugh-Soha, 2008; Rutledge & Larsen Price, 2014; Tan & Weaver, 2007) have been shown to take part in shaping the agenda of this policy. These include the agendas of news media, policymakers (Wood & Peake, 1998), and the public (Soroka, 2003). No role in this process of foreign policy agenda-setting has been allocated yet for foreign policy think tanks. Dubbed the "powerhouses" of American politics (Wiarda, 2008, p. 117), think tanks are growing in influence and significance (Abelson, 1996; Dickson, 1971; McGann, 2005; Sanders, 2009; Weidenbaum, 2009) and could be affecting U.S. foreign policy agenda. If so, they deserve a place in agenda-setting models. On the other hand, while relying heavily on news media in their work, U.S. foreign policy think tanks have not yet been shown to be affected (like other influential in foreign policy groups) by news media content.

This dissertation probes the possibility that news media do affect the agendas of foreign policy think tanks. This work is meant to fulfil two main goals, (1) better our understanding of the role think tanks play in foreign policy by means of exploring agenda-setting as a possible mechanism the impact think tanks have on foreign policy, and (2) advance the knowledge of news media agenda-setting effects in foreign policy by identifying another possible channel of media impacts foreign policy think tanks.

While employing the agenda-setting theory, this dissertation looked at objects (represented by foreign countries) in news coverage from leading U.S. newspapers, *The New York Time*s and *The Washington Post*, and attention to these countries in the corresponding

period (104 full weeks of 2011 and 2012) in the content published on the websites of the top U.S. foreign policy think tanks, Brookings Institution and Carnegie Endowment for International Peace.

As an exploratory study, this work concentrated on searching for illustrations for possible relationships between think tanks and news media that would need to be tested in future research. Accordingly, measures were taken to heighten the likelihood of detecting hypothesized relationships.

In order to increase the chances of detecting relationships between the attention to countries from think tanks and their salience in news coverage, the period for analyses was chosen to include presidential election. During elections greater attention is paid to policy think tanks, including those dealing with foreign policy (Abelson, 1995). Countries with more salience in news coverage were chosen for analysis to ensure that measures on the two newspapers were more likely to be representative of the national news agenda. Appearing in more news outlets, the objects would have more chances to be noticed and possibly adopted as foci of their attention by think tanks. Think tanks are said to adjust their foci to agendas of policymakers (Wiarda, 2008). They could, similarly, be inclined to synchronize their agenda with that of influential in foreign policy news media.

The first of the three hypotheses of this research, arguing that correlations between objects' salience in news and attention to them from think tanks, was partially supported by the data. Results of Pearson's correlations and cross-correlation analyses showed connections between both concurrent and lagged contents. Pre-whitening of the variables using ARIMA techniques helped to avoid overinflating the correlations by eliminating autocorrelations within time series.

While showing strong correlations between the attention think tanks paid in their online content to some countries and the salience of these countries in the news, the data did not provide much support for the hypothesis about issues salience determining the direction of agenda-setting effects between news media and think tanks. The finding suggests that theagenda-setting direction determination may be more nuanced in the case of think tanks than it is in the relationship between news media and presidents (Peake, 2001). While news media may follow closely the marriage of Prince William[44], Duke of Cambridge, think tanks, due to their main interest in advancing the "cause of peace" (Carnegie Endowment for International Peace, n.d.-a), strengthening American Democracy and securing a "more open, safe, prosperous and cooperative international system" (Brookings Institution, n.d.-a) may be less inclined to devote their limited resources to the investigation of the possible impact of Kate Middleton's wedding gown on international politics. They could be especially selective in their attention to mostly entertaining content while at the same time, the civil war in Libya demands immediate attention (and thus, need for expertise) from United Nations and the U.S. Data show that the connection between news coverage and content on websites of leading foreign policy think tanks is strong. At the same time, it draws the line between the two institutions. Mechanisms applicable to intermedia agenda-setting may not work in this case.

Recent research showed that highly salient objects with spikes of attention were very likely to exhibit similar attention patterns across the news media (Atkinson et al., 2014). In other words, an object's ability to enter and shape the national news agenda could be predicted by only

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[44] For Example, *The New York Times* mentioned prince's spouse, Kate Middleton, Duchess of Cambridge, in 284 news articles and 135 blog entries (total of 419), and *The Washington Post* did so in 297 newspaper articles, 197 web-based stories and four blog entries (total of 497) over the analyzed period.

its salience and attention spike in coverage from few or one organizations. Both salience and spike measures are exclusively related to the number of times these objects are mentioned by a news outlet over time. Based on these findings, one could assume that if *The New York Times*, or another prominent national news outlet, periodically devotes a great deal of attention to an object, it is sure to appear as part of the national news agenda as well. Such a rule did not hold true for the propagation countries in the research and advocacy agendas of think tanks in our research. This finding illustrates that think tanks and news media are governed by different principles in their attention, which overlap in some cases but do not in others. These overlapping points may be of special interests for media effects researchers and scholars investigating the impact of think tanks, as the two organizations could possibly amplify (or undermine) each other's input into the U.S. foreign policy processes. One could begin the investigation with an analysis of the types of events and countries traditionally enjoying higher levels of attention from think tanks and try to look for patterns in news coverage of these objects.

The countries with more salience in the news did not appear to be more likely to propagate attention of think tanks; whereas attention from think tanks to less salient in the news issues did not seem to reliably lead news agenda either. While these results are preliminary and bigger samples are necessary to test the significance of different factors[45] determining presence and direction of agenda-setting effects between news media and U.S. foreign policy think tanks, data analysis produced several notable observations. The latter could be used in future research design, as they shed light on possible influential factors and uncover different types of

[45] Such as the nature of events causing interest to a country from news media and think tanks, think tanks policies and plans, and even demographics of their teams of fellows, which could include foreign non-resident contributors led by different sources of news and information than their U.S.-based counterparts.

relationships between the amounts of attention think tanks pay to objects and the salience of these objects in news coverage.

The relationship between the news media coverage and the research and advocacy agendas of think tanks was strong in some cases and appeared situational and nuanced, as the direction of the agenda-setting effects would vary between cases.

(1) The news media were able to influence the agendas of think tanks more in some cases and not at all in others, and vice versa. The nature of events causing spikes of attention from the news media and from the think tanks, as opposed to the sheer volume and strength of spikes in news media attention could be playing an important role in determining whether media could lead foci of attention in content published online by think tanks. Given their specialized interest in foreign policy issues, think tanks seem largely to ignore natural disasters and other events closely followed by the news media. In this research, spikes of attention to Egypt, Libya, Pakistan, and Greece in both the news coverage and the content published by think tanks online coincided with pivotal events in these countries' socio-political development[46] , accompanied by the United States' involvement, or potentially causing outcomes that could affect U.S. interests. While spikes in the news salience of Japan and Turkey were concurrent with natural disasters devastating these countries in March 2011 and November 2011 respectively, the attention to them did not increase in BI's output while additional news coverage for these countries may have triggered a reaction from CE. While the nature of events appears to play a significant role in determining the ability of news media coverage to affect foci of attention of think tanks, additional factors, very likely intrinsic to individual think tanks, are important in enabling media

[46] Such as the 2011 Egyptian Revolution, Libyan Civil War of 2011, death of Osama bin Laden in Pakistan, deep economic crisis in Greece threatening stability of Europe.

effects. The fact that both natural disaster-triggered news salience spikes found reflection in CE's online content could be indicative of an organizational focus and perhaps pre-existing interest to catastrophes and other crises of not entirely political nature. A detailed investigation into the organization's issue foci over time as well as interviews with the think tank's administration and research fellows may shed more light on this question.

(2) The news media agenda and the agendas of think tanks were reciprocal in some cases, while the direction of possible influence was clearer in others. Cross-correlation analyses revealed (a) significant correlations in both directions for Iran and Turkey in news coverage and BI's online content. It showed (b) news media leading the attention of both think tanks in cases of Egypt, Libya and Greece, or (c) the attention of one of the two think tanks (Japan and Turkey in CE's content and India in BI's). And (d) think tanks led the salience of Pakistan (led by CE). In most of the cases where a positive relationship was detected between news coverage and content from think tanks, lagged and concurrent news coverage correlated with attention from think tanks, suggesting that news media took the lead in bringing these countries within the agendas of the analyzed think tanks. However, as the case of Pakistan in CE's content illustrates, sometimes think tank agendas anticipated (and by far) the attention to country received from the news media. In other cases, it is difficult to say, who starts paying attention to a particular country first, as only concurrent salience and attention from think tanks correlated (like in the example of Libya and Brookings Institution), or the influence between news coverage and the content published by think tanks on their websites appeared to be directed both ways (Iran and BI).

(3) In some cases, one of the two think tanks would correlate with news media in its attention to a country and the other one wouldn't. This suggests that exclusive factors for a think

tank could be determining their susceptibility to agenda-setting effects. CE followed the trend in increased coverage of Japan, while BI did not. Similarly, while news media and BI's attention to Iran correlated strongly, no connection was found between Iran's salience in news coverage and the amount of published online content about the country produced by CE.

While it is difficult to conclude with certainty that agenda-setting effects exist between news media and U.S. foreign policy think tanks, the data in some cases show correlation and temporal relationship, the necessary conditions of agenda-setting. These relationships, and factors contributing to them should be explored in more detail in future research. Interviews with research fellows and the administration of think tanks may shed light on factors enabling and determining the direction of agenda-setting effects between news media and think tanks. The strength of these factors could be tested in future research.

Future research

Conducting another set of content analyses, while controlling for nature of "spiking" events and including a greater number of objects (enough for statistically significant results) is imperative for a better understanding of factors determining the direction and strength of the exchange between media and think tank agendas. The nature of events, causing increased attention in both institutions, could be one explanation of the situational nature of agenda-setting effects and other factors. These might include the composition of research teams in various think tanks, their goals, research and editorial policies. Studying the funding sources, the history of attention to various types of issues from think tanks and other factors interviewing research fellows and administrations of think tank may reveal.

Before the next set of content analyses or experimental studies, exploratory interviews and surveys need to be conducted in order to gain a better insight into possible factors affecting the presence and strength of agenda-setting effects in foreign policy research and advocacy. Some of the questions may directly ask research fellows and administration about their decision-making and prioritization of the topics, about sources of information they use for their work and outside work-related activities. Deeper, long-form interviewing techniques may many factors to be tested in the future.

As the sweep and importance of social media are growing, it is important to look into their potential role in foreign policy agenda-setting. Thus, interviews among research fellows and the administration of think tanks should ask questions about preferred and more utilized sources of news and relevant to work information. If social media and/or other sources are identified as valuable for think tanks, their content should be included in further studies.

Other elements of the foreign agenda-setting processes (policymakers and the public) and their agendas need to be considered as factors as well. Effects of think tanks foci on agendas of policymakers need to be tested in order to substantiate the possible role of think tanks as channels of (or amplifiers) of news media effects on foreign policy agenda.

As an exploratory study, this research produced results of limited generalizability. Accordingly, some of its limitations need to be addressed in future studies on the topic. This dissertation deliberately selected organizations and cases more likely to display relationships between news coverage and online content of think tanks in order to explore the nature of such relationships. Drawing a representative sample of organizations is necessary for future research. It is important to consider objects of wider news salience spectrum in order to test the role of the news salience factor in enabling agenda-setting effects.

A possible explanation for some of the relationships between think tanks and news media only existing during unity time (lag 0 in cross-correlations in case of Pakistan and Brookings Institution) might be rooted in the weekly basis of the time series analyzed in this research. Sampling data on a daily basis may produce more detailed pictures of think tanks and news media relationship.

Since content analysis is not necessarily the best method for a test of causal relationships, a natural experiment could provide more definitive proof of agenda-setting effects in foreign policy research and advocacy.

This dissertation contributed to our knowledge and understanding of agenda-setting effects by identifying more possible channels of media effects in foreign policy (indirectly, via effects on think tanks, an arguably influential institution). It illustrated that the news agenda could be set by an expert organization's foci or engage in more complicated, reciprocal agenda-setting exchanges with such organizations. While more research is needed to make more generalizable conclusions and to evaluate the impact of various factors in foreign policy agenda-setting, this dissertation provides a basis for further exploration and for inclusion of think tanks into the foreign policy agenda-setting research.

References

Abelson, D. E. (1995). From policy research to political advocacy: The changing role of think tanks in American politics. *Canadian Review of American Studies, 25*(1), 93.

Abelson, D. E. (1996). *American think-tanks and their role in US foreign policy*. New York, NY: St. Martin's Press.

Abelson, D. E. (2004). The Business of Ideas: The Think Tank Industry in the USA. In D. Stone & A. Denham (Eds.), *Think tank tarditions: Policy reserach and the politics of ideas* (pp. 215 - 231). Mancheste, UK: Manchester Unievrsity Press.

Abelson, D. E. (2006). *A capitol idea : think tanks and US foreign policy*. Montreal, QC: McGill-Queen's University Press.

Abelson, D. E. (2009). *Do think tanks matter? : Assessing the impact of public policy institutes*. Montréal, Québec: McGill-Queen's University Press.

Abelson, D. E. (2012a). Theoretical Models and Approaches to Understanding the Role of Lobbies and Think Tanks in US Foreign Policy. In S. Brooks, D. Stasiak, & T. Żyro (Eds.), *Policy expertise in contemporary democracies* (pp. 9 -30). Burlington, VT: Ashgate.

Abelson, D. E. (2012b). Thinking Out Loud: Think Tanks and Their Quest for Public Exposure. Research Paper, Number 2. London, Ontario: The Canada-US Institute, The University of Western Ontario.

Ahmad, M. (2008). US Think Tanks and the Politics of Expertise: Role, Value and Impact. *Political Quarterly, 79*(4), 529-555. doi: 10.1111/j.1467-923X.2008.00964.x

Annual Report 2012. (2012). Washington, DC: The Heritage Foundation.

Atkinson, M. L., Lovett, J., & Baumgartner, F. R. (2014). Measuring the Media Agenda. *Political Communication, 31*(2), 355-380. doi: 10.1080/10584609.2013.828139

Baum, M. A., & Potter, P. B. K. (2008). The Relationships Between Mass Media, Public Opinion, and Foreign Policy: Toward a Theoretical Synthesis. *Annual Review of Political Science, 11*(1), 39-65. doi: doi:10.1146/annurev.polisci.11.060406.214132

Benton, M., & Frazier, P. J. (1976). The Agenda Setting Function of the Mass Media At Three Levels of "Information Holding". *Communication Research, 3*(3), 261-274. doi: 10.1177/009365027600300302

Bimber, B. (2011). How Information Shapes Political Institutions. In D. A. Graber (Ed.), *Media power in politics* (pp. 7-18). Washington, D.C.: CQ Press.

Brookings Institution (2014). Annual Report 2014. Washington, DC: The Brookings Institution.

Brookings Institution (n.d.-a). About Brookings. Retrieved 07/06/2015, from http://www.brookings.edu/about#research-programs/

Brookings Institution (n.d.-b). Brookings Institution History. Retrieved 06/06/2015, from http://www.brookings.edu/about/history

Brookings Institution (n.d.-c). The Global Institute. Retrieved 05/04/2015, from http://www.brookings.edu/about/projects/global-institute

Burstein, P. (1998). Bringing the Public Back In: Should Sociologists Consider the Impact of Public Opinion on Public Policy? *Social Forces, 77*(1), 27-62. doi: 10.1093/sf/77.1.27

Campbell, V. P., Gibson, R., Gunter, B., & Touri, M. (2009). News Blogs, Mainstream News and News Agendas. In S. Tunney & G. Monaghan (Eds.), *Web journalism: A new form of citizenship?* Eastbourne, UK: Sussex Academic Press.

Carnegie Endowment for International Peace (n.d.-a). About Carnegie Endowment. from http://carnegieendowment.org/about/

Carnegie Endowment for International Peace (n.d.-b). About the Carnegie Moscow Center. from http://carnegie.ru/about/?lang=en

Chatfield, C. (2004). The analysis of time series : an introduction (6th ed.. ed.). Boca Raton, FL: Boca Raton, FL : Chapman & Hall/CRC.

Cobb, R., Ross, J.-K., & Ross, M. H. (1976). Agenda Building as a Comparative Political Process. *The American Political Science Review, 70*(1), 126-138. doi: 10.2307/1960328

Cobb, R. W., & Elder, C. D. (1971). The Politics of Agenda-Building: An Alternative Perspective for Modern Democratic Theory. *The Journal of Politics, 33*(4), 892-915. doi: 10.2307/2128415

Cohen, B. C. (1963). *The press and foreign policy*. Princeton, NJ: Princeton University Press.

Cook, F. L., Tyler, T. R., Goetz, E. G., Gordon, M. T., Protess, D., Leff, D. R., & Molotch, H. L. (1983). Media and Agenda Setting: Effects on the Public, Interest Group Leaders, Policy Makers, and Policy. *Public Opinion Quarterly, 47*(1), 16.

Dearing, J. W. (1996). *Agenda-setting*. Thousand Oaks, Calif.: Thousand Oaks, Calif. : Sage.

Denham, A., & Garnett, M. (1996). The Nature and Impact of Think Tanks in Contemporary Britain. In M. D. Kandiah & A. Seldon (Eds.), *Ideas and think tanks in contemporary Britain* (Vol. 1, pp. 43-61). London, UK: Frank Cass.

Denham, B. E. (2014). Intermedia Attribute Agenda Setting in the New York Times : The Case of Animal Abuse in U.S. Horse Racing. *Journalism & Mass Communication Quarterly, 91*(1), 17-37. doi: 10.1177/1077699013514415

Dickson, P. (1971). *Think tanks*. New York, NY: Atheneum.

Division, U. N. S. (2013). Composition of Macro Geographical (continental) Regions, Geographical Sub-Regions, and Selected Economic and Other Groupings. Retrieved 03/07, 2015, from http://unstats.un.org/unsd/methods/m49/m49regin.htm

Edwards, G. C., & Wood, B. D. (1999). Who influences whom? The president, congress, and the media. *American Political Science Review, 93*(2), 327.

Entman, R. M. (2000). Declarations of Independence: The Growth of Media Power after the Cold War. In B. L. Nacos, R. Y. Shapiro, & P. Isernia (Eds.), *Decisionmaking in a glass house : mass media, public opinion, and American and European foreign policy in the 21st century* (pp. 11-26). Lanham, MD: Rowman & Littlefield Publishers.

Entman, R. M. (2004). *Projections of power : framing news, public opinion, and U.S. foreign policy*. Chicago: Chicago : University of Chicago Press.

Finkel, S. E., Pérez-Liñán, A., & Seligson, M. A. (2007). The Effects of U.S. Foreign Assistance on Democracy Building, 1990-2003. *World Politics, 59*(3), 404-438. doi: 10.2307/40060164

Golan, G. (2006). Inter-Media Agenda Setting and Global News Coverage. *Journalism Studies, 7*(2), 323-333. doi: 10.1080/14616700500533643

Haass, R. N. (2002). Think Tanks and U.S. Foreign Policy: A Policy-Maker's Perspective. *U.S. Foreign Policy Agenda, 7*, 5-8.

Heritage Foundation, T. (2014). Annual Report 2013. Washington, DC: The Heritage Foundation.

Hicks, D. B. (1996). Dueling decisions: contrasting constitutional visions of the United States president's foreign policy role. *Policy Studies Journal, 24*, 245+.

Iyengar, S., & Kinder, D. R. (1987). *News that matters : Television and American opinion*. Chicago, IL: University of Chicago Press.

Jacobs, L. R., & Page, B. I. (2005). Who Influences U.S. Foreign Policy? *American Political Science Review, 99*(01), 107-123. doi: doi:10.1017.S000305540505152X

Jody, S. F. (1983). Note on Presidential Foreign Policy Power (part II): The Foreign Policy Role of the President: Origins and Limitations. *Hofstra Law Review, 11*, 773-1353.

Jones, B. D. (2005). The politics of attention : how government prioritizes problems. In F. R. Baumgartner (Ed.). Chicago: Chicago : University of Chicago Press.

Kiousis, S. (2004). Explicating Media Salience: A Factor Analysis of New York Times Issue Coverage During the 2000 U.S. Presidential Election. *Journal of Communication, 54*(1), 71-87.

Krastev, I. (2001). Think Tanks: Making and Faking Influence. *Journal of Southeast European & Black Sea Studies, 1*(2), 17.

Ladi, S. (2005). *Globalisation, policy transfer and policy research institutes*. Northampton, MA: E. Elgar.

Lippmann, W. (1922). *Public opinion*. New York: Harcourt, Brace and Co.

Mangi, L. (1994). The Role of President and Bureaucracy in US Foreign Policy-Making. *Pakistan Horizon, 47*(4), 33-61. doi: 10.2307/41393500

Manheim, J. B. (1986). A Model of Agenda Dynamics. *Communication Yearbook, 10*, 499-516.

McCombs, M. E. (2004). *Setting the agenda : the mass media and public opinion*. Cambridge : Malden, MA: Cambridge : Polity

Malden, MA : Blackwell Pub.

McCombs, M. E. (2005). A Look at Agenda-setting: past, present and future. *Journalism Studies, 6*(4), 543-557. doi: 10.1080/14616700500250438

McCombs, M. E., & Shaw, D. L. (1972). The Agenda-Setting Function of Mass Media. *Public Opinion Quarterly, 36*(2), 176-187.

McCombs, M. E., & Shaw, D. L. (1978). Agenda-Setting and the Political Process. In D. L. Shaw & M. McCombs (Eds.), *The emergence of American political issues: the agenda-setting function of the press* (pp. 149-156). St. Paul: West Pub. Co.

McCombs, M. E., & Shaw, D. L. (1993). The Evolution of Agenda-Setting Research: Twenty-Five Years in the Marketplace of Ideas. *Journal of Communication, 43*(2), 58-67. doi: 10.1111/j.1460-2466.1993.tb01262.x

McCombs, M. E., & Weaver, D. H. (1985). Toward a Merger of Gratifications and Agenda-Setting Research. In K. E. Rosengren, L. A. Wenner, & P. Palmgreen (Eds.), *Media gratifications research : current perspectives*. Beverly Hills, Calif.: Beverly Hills, Calif. : Sage Publications.

McGann, J. G. (1995). *The competition of for dollars, scholars and influence in the public policy research industry*. Lanham, MD: University Press of America.

McGann, J. G. (2005). *Comparative think tanks, politics and public policy*. Northampton, MA: Edward Elgar.

McGann, J. G. (2007). The Global "Go-to Think Tanks". from https://studentaffairs.stanford.edu/sites/default/files/cdc/files/mcgann.globalgotothinktanks.pdf

McGann, J. G. (2008). 2008 Global go to think tank index report. from http://repository.upenn.edu/cgi/viewcontent.cgi?article=1000&context=think_tanks

McGann, J. G. (2009). 2009 Global go to think tank index report. from http://repository.upenn.edu/cgi/viewcontent.cgi?article=1001&context=think_tanks

McGann, J. G. (2010a). 2010 Global go to think tank index report. from http://repository.upenn.edu/cgi/viewcontent.cgi?article=1004&context=think_tanks

McGann, J. G. (2010b). *Democratization and market reform in developing and transitional countries: Think tanks as catalysts*. New York, NY: Routledge.

McGann, J. G. (2011a). 2011 Global go to think tank index report. from http://repository.upenn.edu/cgi/viewcontent.cgi?article=1005&context=think_tanks

McGann, J. G. (2011b). *Global think tanks : Policy networks and governance*. New York, NY: Routledge.

McGann, J. G. (2012). 2012 Global go to think tank index report. from http://repository.upenn.edu/cgi/viewcontent.cgi?article=1006&context=think_tanks

McGann, J. G. (2014). 2013 Global go to think tank index report. from http://gotothinktank.com/dev1/wp-content/uploads/2014/01/GoToReport2013.pdf

McGann, J. G. (2015). 2014 Global go to think tank index report. from http://gotothinktank.com/dev1/wp-content/uploads/2014/01/GoToReport2013.pdf

McGann, J. G., & Weaver, R. K. (2000). Think tanks and civil societies : catalysts for ideas and action. New Brunswick, NJ: Transaction Publishers.

McNutt, K., & Marchildon, G. (2009). Think Tanks and the Web: Measuring Visibility and Influence. *Canadian Public Policy, 35*(2), 219-236.

Medvetz, T. (2012). *Think tanks in America*. Chicago, IL: University of Chicago Press.

Meernik, J. (1996). United States Military Intervention and the Promotion of Democracy. *Journal of Peace Research, 33*(4), 391-402. doi: 10.2307/424565

Miller, D. (2007). Media pressure on foreign policy the evolving theoretical framework. In I. ebrary (Ed.). New York, NY: Palgrave Macmillan.

Mulcahy, K. V. (1987). Presidents and the Administration of Foreign Policy: The New Role for the Vice President. *Presidential Studies Quarterly, 17*(1), 119-131. doi: 10.2307/27550398

Mutz, D. C. (1998). Impersonal influence : how perceptions of mass collectives affect political attitudes. New York : Cambridge University Press.

Nacos, B. L., Shapiro, R. Y., & Isernia, P. (2000). Old or New Ball Game? Mass Media, Public Opinion, and Foreign Policy in the Post-Cold War World. In B. L. Nacos, R. Y. Shapiro, & P. Isernia (Eds.), *Decisionmaking in a glass house : mass media, public opinion, and American and European foreign policy in the 21st century* (pp. 1-10). Lanham, MD: Rowman & Littlefield Publishers.

O'Heffernan, P. (1991). *Mass media and American foreign policy : insider perspectives on global journalism and the foreign policy process*. Norwood, NJ: Ablex Pub.

O'Neill, R. (2008). Think Tanks and Their Impact. *Asia-Pacific Review, 15*(2), 9-12. doi: 10.1080/13439000802511091

Page, B. I., & Shapiro, R. Y. (1983). Effects of Public Opinion on Policy. *American Political Science Review, 77*(01), 175-190. doi: doi:10.2307/1956018

Patrick, J. J., Pious, R. M., & Ritchie, D. A. Brains Trust: 'Oxford University Press'.

Pautz, H. (2011). Revisiting the think-tank phenomenon. *Public Policy and Administration, 26*(4), 419-435. doi: 10.1177/0952076710378328

Peake, J. S. (2001). Presidential Agenda Setting in Foreign Policy. *Political Research Quarterly, 54*(1), 69-86. doi: 10.2307/449208

Peake, J. S., & Eshbaugh-Soha, M. (2008). The Agenda-Setting Impact of Major Presidential TV Addresses. *Political Communication, 25*(2), 113-137. doi: 10.1080/10584600701641490

RAND (n.d.). RAND Corporation History and Mission. from http://www.rand.org/about/history.html

Reiss, J., & Sprenger, J. (2014). Scientific Objectivity. In E. N. Zalta (Ed.), *Stanford Encyclopedia of Philosoph* (Fall 2014 ed.).

Ricci, D. M. (1993). *The transformation of American politics : the new Washington and the rise of think tanks*. New Haven, CT: Yale University Press.

Rich, A. (2001). The Politics of Expertise in Congress and the News Media. *Social Science Quarterly (Wiley-Blackwell), 82*(3), 583.

Rich, A. (2004). Think tanks, public policy, and the politics of expertise. New York, NY: Cambridge University Press.

Rich, A., & Weaver, R. K. (2000). Think Tanks in the U.S. Media. *Harvard International Journal of Press/Politics, 5*(4), 81.

Robertson, D. B. (2014). The Progressive Era. In D. Beland, C. Howard, & K. J. Morgan (Eds.), *Oxford Handbook of U.S. Social Policy*. Cary, NC: Oxford University Press.

Rogers, E. M., Dearing, J. W., & Bregman, D. (1993). The anatomy of agenda-setting research. *Journal of Communication, 43*(2), 68-84.

Rosefielde, S. (2007). *Masters of illusion : American leadership in the media age*. New York, NY: Cambridge University Press.

Rutledge, P. E., & Larsen Price, H. A. (2014). The President as Agenda Setter-in-Chief: The Dynamics of Congressional and Presidential Agenda Setting. *Policy Studies Journal, 42*(3), 443-464. doi: 10.1111/psj.12068

Sanders, K. (2009). *Communicating politics in the twenty-first century*. New York, NY: Palgrave Macmillan.

Scheufele, D. A., & Tewksbury, D. (2007). Framing, Agenda Setting, and Priming: The Evolution of Three Media Effects Models. *Journal of Communication, 57*(1), 9-20. doi: 10.1111/j.0021-9916.2007.00326.x

Scott, J. M. (1999). Transnationalizing democracy promotion: The role of Western political foundations and think-tanks. *Democratization, 6*(3), 146-170. doi: 10.1080/13510349908403625

Serfaty, S. (1990). The Media and Foreign Policy. In S. Serfaty (Ed.), *The Media and foreign policy* (pp. 1-18). New York, NY: St. Martin's Press.

Shapiro, R. Y., & Jacobs, L. R. (2000). Who Leads and Who Follows? U.S. Presidnets, Public Opinion, and Foreign Policy. In B. L. Nacos, R. Y. Shapiro, & P. Isernia (Eds.), *Decisionmaking in a glass house : mass media, public opinion, and American and European foreign policy in the 21st century* (pp. 223-246). Lanham, MD: Rowman & Littlefield Publishers.

Smith, J. A. (1991). *The idea brokers : think tanks and the rise of the new policy elite*. New York, NY: Maxwell Macmillan International.

Smith, P. I. S. (1971). *Think tanks and problem solving*. London, UK: Business Books.

Soroka, S. N. (2003). Media, Public Opinion, and Foreign Policy. *The International Journal of Press/Politics, 8*(1), 27-48. doi: 10.1177/1081180x02238783

Tan, Y., & Weaver, D. H. (2007). Agenda-Setting Effects among the Media, the Public, and Congress, 1946–2004. *Journalism & Mass Communication Quarterly, 84*(4), 729-744. doi: 10.1177/107769900708400405

Van Aelst, P., & Walgrave, S. (2011). Minimal or Massive? The Political Agenda-Setting Power of the Mass Media According to Different Methods. *International Journal of Press/Politics, 16*(3), 295-313. doi: 10.1177/1940161211406727

Vu, H. T., Guo, L., & McCombs, M. E. (2014). Exploring “the World Outside and the Pictures in Our Heads”: A Network Agenda-Setting Study. *Journalism & Mass Communication Quarterly, 91*(4), 669-686. doi: 10.1177/1077699014550090

Walgrave, S., Soroka, S., & Nuytemans, M. (2008). The Mass Media's Political Agenda-Setting Power: A Longitudinal Analysis of Media, Parliament, and Government in Belgium (1993 to 2000). *Comparative Political Studies, 41*(6), 814-836. doi: 10.1177/0010414006299098

Wanta, W., Golan, G., & Lee, C. (2004). Agenda Setting and International News: Media Influence on Public Perceptions of Foreign Nations. *Journalism & Mass Communication Quarterly, 81*(2), 364-377. doi: 10.1177/107769900408100209

Weaver, D. (1991). Issue Salience and Public Opinion: Are There Consequences of Agenda-setting? *International Journal of Public Opinion Research, 3*(1), 53-68. doi: 10.1093/ijpor/3.1.53

Weaver, R. K. (1989). The Changing World of Think Tanks. *PS: Political Science and Politics, 22*(3), 563-578. doi: 10.2307/419623

Weidenbaum, M. L. (2009). *The competition of ideas: The world of the Washington think tanks*. New Brunswick, NJ: Transaction Publishers.

Weidenbaum, M. L. (2010). Measuring the Influence of Think Tanks. *Society, 47*(2), 134-137. doi: 10.1007/s12115-009-9292-8

Wiarda, H. J. (2006). *The crisis of American foreign policy : the effects of a divided America*. Lanham, Md.: Lanham, Md. : Rowman & Littlefield.

Wiarda, H. J. (2008). The New Powerhouses: Think Tanks and Foreign Policy. *American Foreign Policy Interests, 30*(2), 96-117. doi: 10.1080/10803920802022704

Wiarda, H. J. (2009). *Divided America on the world stage : broken government and foreign policy*. Washington, DC: Potomac Books.

Wood, B. D., & Peake, J. S. (1998). The Dynamics of Foreign Policy Agenda Setting. *The American Political Science Review, 92*(1), 173-184. doi: 10.2307/2585936

Yanovitzky, I., & VanLear, A. (2008). Time Series Analysis: Traditional and Contemporary Approaches. In A. F. Hayes, M. D. Slater, & L. B. Snyder (Eds.), *The Sage sourcebook of advanced data analysis methods for communication research*. Los Angeles, CA: Sage Publications.

Appendices

Appendix A. Object agenda-setting search terms

Region		Serch Term	2011 hits
Africa	*Eastern Africa*	Burundi	38
		Comoros	8
		Djibouti	32
		Eritrea	46
		Ethiopia	305
		Kenya	551
		Madagascar	92
		Malawi	48
		Mauritius	34
		Mayotte	1
		Mozambique	61
		Réunion island	0
		Rwanda	174
		Seychelles	21
		Somalia	433
		"South Sudan"	104
		Uganda	255
		Tanzania	140
		Zambia	73
		Zimbabwe	198
	Middle Africa	Angola	74
		Cameroon	80
		"Central African Republic"	13
		Chad	704
		Congo	276
		"Equatorial Guinea"	41
		Gabon	33
		Sao Tome and Principe	1
	Northern Africa	Algeria	230
		Egypt or Cairo or Tahrir or Mubarak or Omar Suleiman	2695
		Libya	2113
		Morocco	341
		Sudan	401
		Tunisia	887
		"Western Sahara"	14
	Southern Africa	Botswana	58
		Lesotho	8
		Namibia	45
		South Africa	885
		Swaziland	18
	Western Africa	Benin	47
		Burkina Faso	58
		Cabo Verde or Cape Verde	13
		Cote d'Ivoire	145
		Gambia	25
		Ghana	162

		Guinea AND NOT "Guinea-Bissau" AND NOT "French Guiana" AND NOT "Papua New Guinea" AND NOT "Equatorial Guinea"	198
		"Guinea-Bissau"	12
		Liberia	114
		Mali	109
		Mauritania	44
		Niger	133
		Nigeria	336
		Saint Helena	2
		Senegal	127
		Sierra Leone	83
		Togo	23
Americas	***Caribbean***	Anguilla	11
		Antigua and Barbuda	19
		Aruba	29
		Bahamas	114
		Barbados	36
		Bonaire, Sint Eustatius and Saba or Caribbean Netherlands	0
		British Virgin Islands	19
		Cayman Islands	57
		Cuba	702
		Curaçao	22
		Dominica	17
		"Dominican Republic"	213
		Grenada	28
		Guadeloupe	35
		Haiti	425
		Jamaica	487
		Martinique	21
		Montserrat	18
		Puerto Rico	294
		Saint-Barthélemy	2
		Saint Kitts and Nevis	16
		Saint Lucia	2
		Saint Martin	30
		Saint Vincent and the Grenadines	10
		Sint Maarten	1
		Trinidad and Tobago	81
		Turks and Caicos Islands	13
	Central America	Belize	31
		Costa Rica	188
		El Salvador	121
		Guatemala	158
		Honduras	143
		Mexico	2898

		Nicaragua	90
		Panama	296
	South America	Argentina	615
		Bolivia	117
		Brazil	1462
		Chile	539
		Colombia	449
		Ecuador	185
		Falkland Islands or Malvinas	11
		"French Guiana"	10
		Guyana	52
		Paraguay	88
		Peru	263
		Suriname	36
		Uruguay	138
		Venezuela	335
	Northern America	Bermuda	138
		Canada	3379
		Greenland	94
		Saint Pierre and Miquelon	2
Asia	***Central Asia***		
		Kazakhstan	133
		Kyrgyzstan	39
		Tajikistan	49
		Turkmenistan	29
		Uzbekistan	81
	Eastern Asia	China	5510
		Hong Kong	1037
		Macao	36
		North Korea	434
		Japan or Tokyo or Naoto Kan	3764
		Mongolia	94
		South Korea	793
	Southern Asia	Afghanistan	2761
		Bangladesh	192
		Bhutan	39
		India	2769
		Iran	1527
		Maldives	40
		Nepal	128
		Pakistan	1534
		Sri Lanka	127
	South-Eastern Asia	Brunei Darussalam	11
		Cambodia	210
		Indonesia	470
		Lao People's	38

		Democratic Republic	
		Malaysia	232
		Myanmar or Burma	237
		Philippines	377
		Singapore	507
		Thailand	504
		Timor-Leste	11
		Viet Nam	231
	Western Asia	Armenia	76
		Azerbaijan	78
		Bahrain	506
		Cyprus	122
		Georgia or Yerevan or Saakashvili AND NOT Atlanta AND NOT Savanna AND NOT Augusta AND NOT Mrietta AND NOT Columbus AND NOT football AND NOT basketball AND NOT baseball	1084
		Iraq	2556
		Israel or Netanyahu or Gaza	2833

		Jordan AND NOT football AND NOT basketball AND NOT baseball AND NOT Chuch w/3 Jordan AND NOT Michael w/3 Jordan AND NOT Brooklyn AND NOT obituary AND NOT Broadway AND NOT Oakland AND NOT Mr. Jordan AND NOT Ms. Jordan AND NOT Mr. Jordan AND NOT Joe w/3 Jordan AND NOT Mississippi AND NOT Jim w/3 Jordan AND NOT Robert w/3 Jordan AND NOT Hal Jordan AND NOT Berman AND NOT Hockey	671
		Kuwait	246
		Lebanon	785
		Oman	98
		Qatar	420
		Saudi Arabia	858
		Palestine	289
		Syria	1178
		Turkey	1727
		United Arab Emirates	424
		Yemen	831

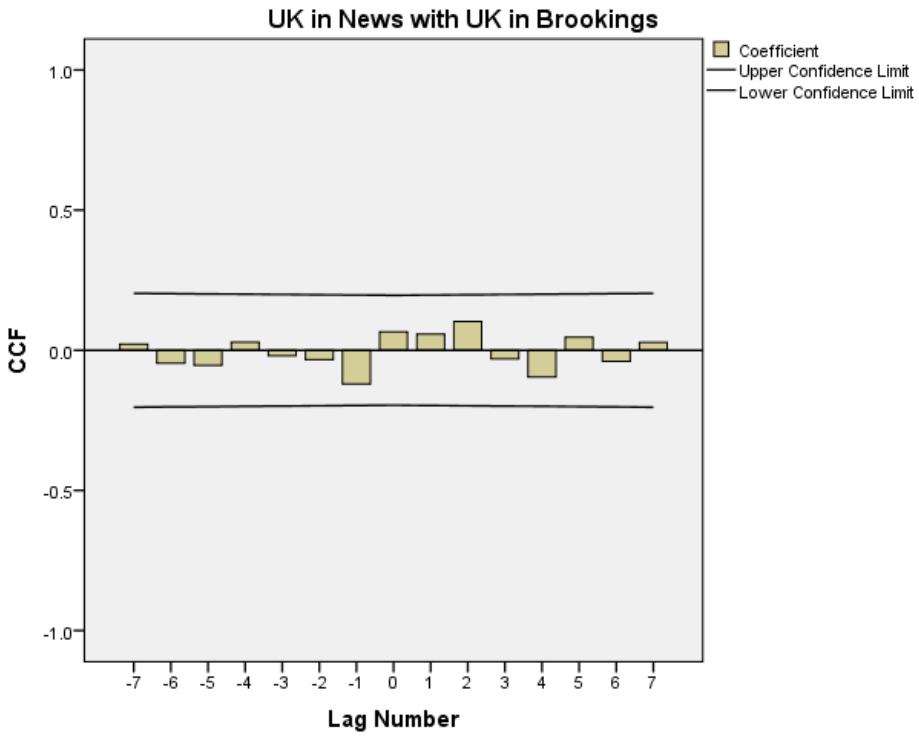
Europe	***Eastern Europe***		
		Belarus	217
		Bulgaria	119
		Czech Republic	337
		Hungary	301
		Poland	587
		Moldova	44
		Romania	238
		Russia or Moscow or Medvedev or Putin	3069
		Slovakia	132
		Ukraine	500
	Northern Europe	Åland Islands	3
		Channel Islands	13
		Denmark	480
		Estonia	127
		Faeroe Islands	2
		Finland	370
		Guernsey	20
		Iceland	213
		Ireland	1413
		Isle of Man	15
		Bailiwick of Jersey	0
		Latvia	76
		Lithuania	95
		Norway	588
		Sark Island	0
		Svalbard Jan Mayen Islands	0
		Sweden	871
		United Kingdom or England or Britain or London	12448
	Southern Europe	Albania	84
		Andorra	11
		Bosnia and Herzegovina	138
		Croatia	218
		Gibraltar	29
		Greece	1680
		Holy See	139
		Italy or Rome or Berlusconi	3815
		Malta	98
		Montenegro	191
		Portugal	812
		San Marino	30
		Serbia	288
		Slovenia	128
		Spain	2252
		Macedonia	46
	Western	Austria	592
		Belgium	937

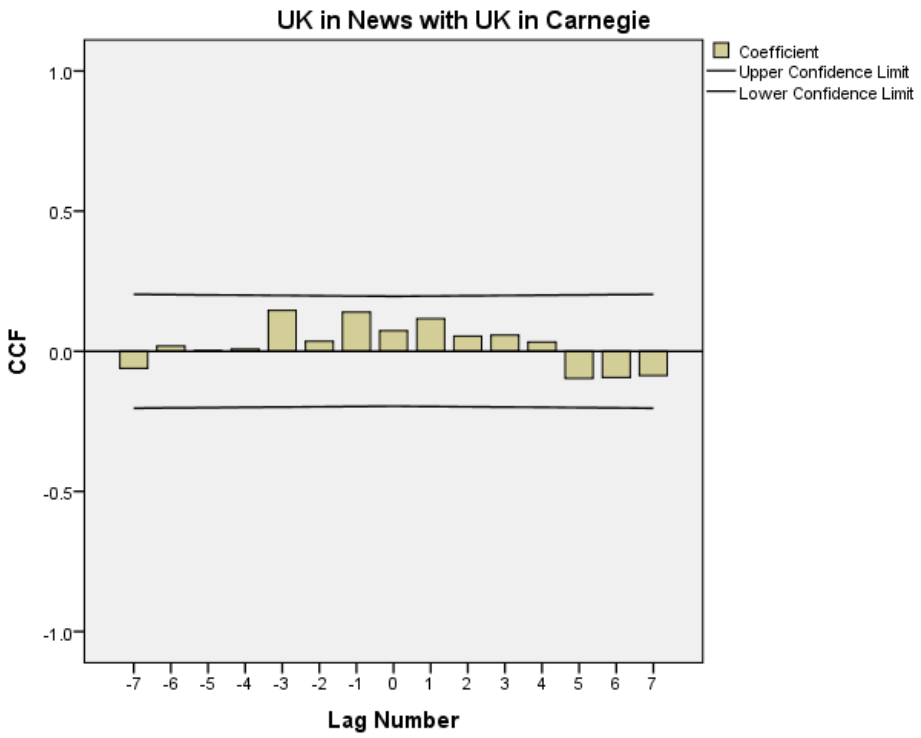
		France or Paris or Sarkozy	8848
		Germany or Berlin or Merkel	1007
		Liechtenstein	5
		Luxembourg	33
		Monaco	20
		Netherlands	197
		Switzerland	256
Oceania	***Australia and New Zealand***	Australia	299
		New Zealand	67
		Norfolk Island	0
	Melanesia	Fiji	3
		New Caledonia	0
		"Papua New Guinea"	11
		Solomon Islands	2
		Vanuatu	
	Micronesia	Guam	14
		Kiribati	2
		Marshall Islands	4
		Micronesia	1
		Nauru	0
		Northern Mariana Islands	0
		Palau	5
	Polynesia	American Samoa	6
		Cook Islands	3
		French Polynesia	1
		Niue	0
		Pitcairn	0
		Samoa	7
		Tokelau	1
		Tonga	7
		Tuvalu	0
		Wallis Futuna Islands	0

Appendix B. Top 25 salient countries in 2011 New York Times coverage

Search Term	Country	Sum	Salience	Spike	Relative Deviation	Increase rate
Egypt or Cairo or Tahrir or Mubarak or Omar Suleiman	Egypt	2695	225	1.34	45.24	4.08
Turkey or Ankara	Turkey	1741	145	1.31	48.81	6.50
Pakistan or Islamabad	Pakistan	1536	128	1.13	38.30	0.83
Libya or Tripoli	Libya	2139	178	1.10	51.83	6.75
Greece	Greece	1680	140	0.85	50.02	4.67
Japan or Tokyo or Naoto Kan	Japan	3664	305	0.69	31.05	11.58
Iran or Tehran	Iran	1560	130	0.60	34.89	5.75
Canada or Ottawa	Canada	3455	288	0.50	24.14	12.50
Brazil or Brasilia or Sao Paulo or Rio de Janeiro or Dilma Rousseff	Brazil	1522	127	0.50	30.66	4.83
India or Delhi	India	2769	231	0.49	34.72	12.42
Syria or Damascus	Syria	1201	100	0.46	31.56	6.67
Italy or Rome or Berlusconi	Italy	3715	310	0.45	27.17	13.83
Russia or Moscow or Medvedev or Putin	Russia	3069	256	0.44	24.46	10.75
Ireland or Dublin	Ireland	1559	130	0.39	24.56	3.33
Afghanistan or Kabul or Karzai	Afghanistan	2792	233	0.37	20.96	5.17
Israel or Netanyahu or Gaza	Israel	2833	236	0.37	18.29	4.50
United Kingdom or England or Britain or London	United Kingdom	11404	950	0.34	26.05	30.58
Spain or Madrid	Spain	2513	209	0.32	30.93	8.50
Georgia or Yerevan or Saakashvili AND NOT Atlanta AND NOT Savanna AND NOT Augusta AND NOT Mrietta AND NOT Columbus AND NOT football AND NOT basketball AND NOT baseball AND NOT Hockey	Georgia	1078	90	0.31	17.05	0.17
Iraq or Baghdad	Iraq	2643	220	0.31	17.74	7.25
Germany or Berlin or Merkel	Germany	4877	406	0.31	26.80	19.33
France or Paris or Sarkozy	France	8848	737	0.28	21.04	14.83
Hong Kong or Donald Tsang	Hong Kong	1037	86	0.25	19.19	2.25
China or Beijing	China	5641	470	0.23	20.66	13.50
Mexico or Calderon	Mexico	2940	245	0.21	17.27	4.33

Appendix C. Insignificant Cross-Correlations between Times Series




UK in News with UK in Carnegie
Coefficient
Upper Confidence Limit
Lower Confidence Limit
CCF
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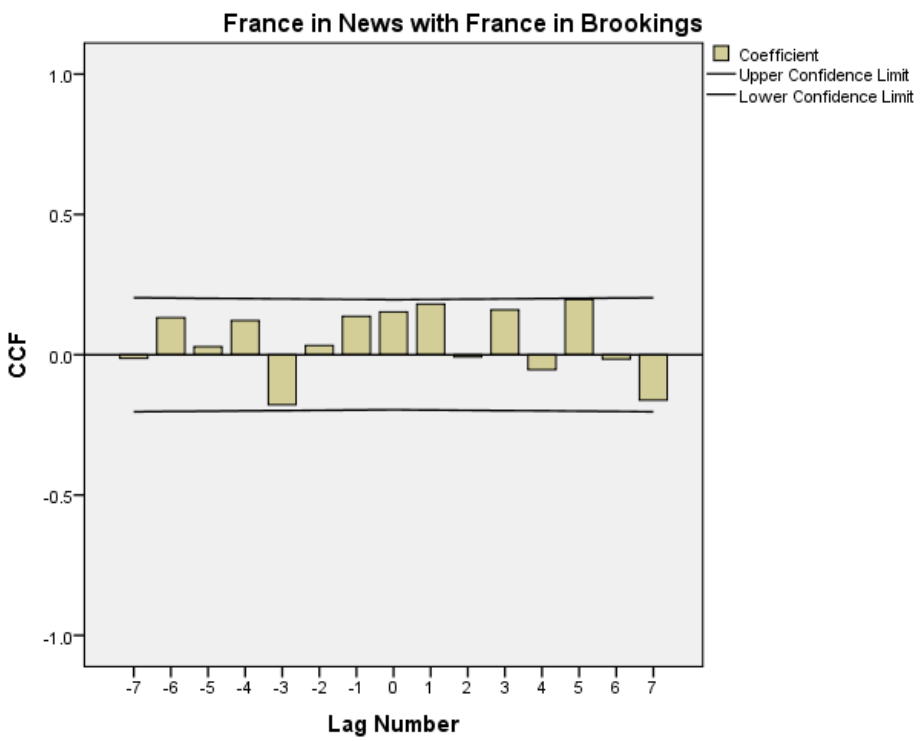
0.5
0.0
-0.5
-1.0
-7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7
Lag Number


France in News with France in Brookings
Coefficient
Upper Confidence Limit
Lower Confidence Limit
CCF
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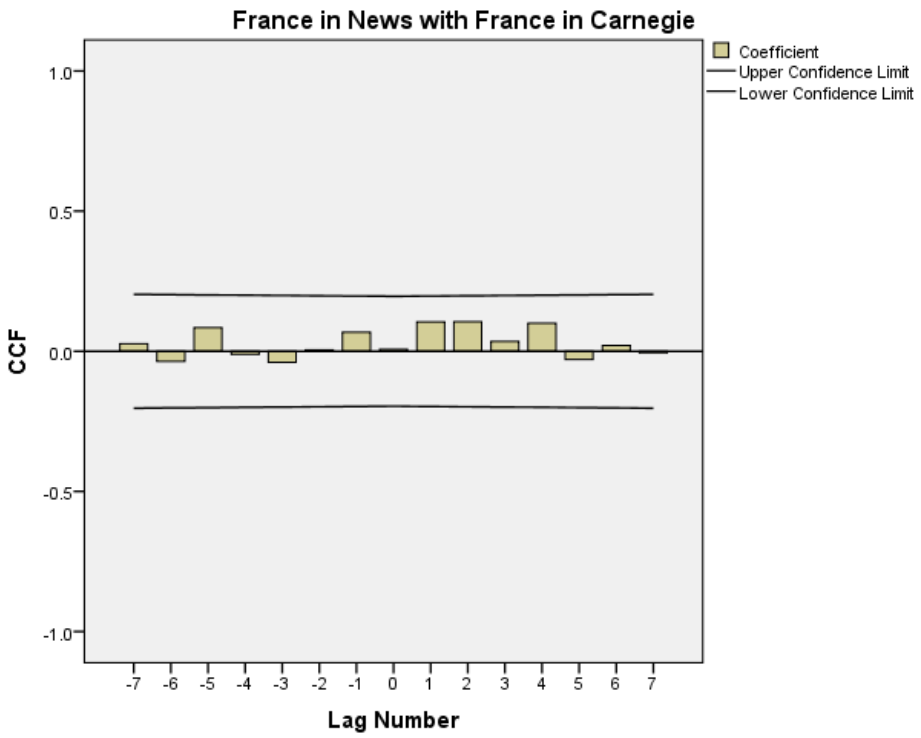
0.5
0.0
-0.5
-1.0
-7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7
Lag Number


France in News with France in Carnegie
Coefficient
Upper Confidence Limit
Lower Confidence Limit
CCF
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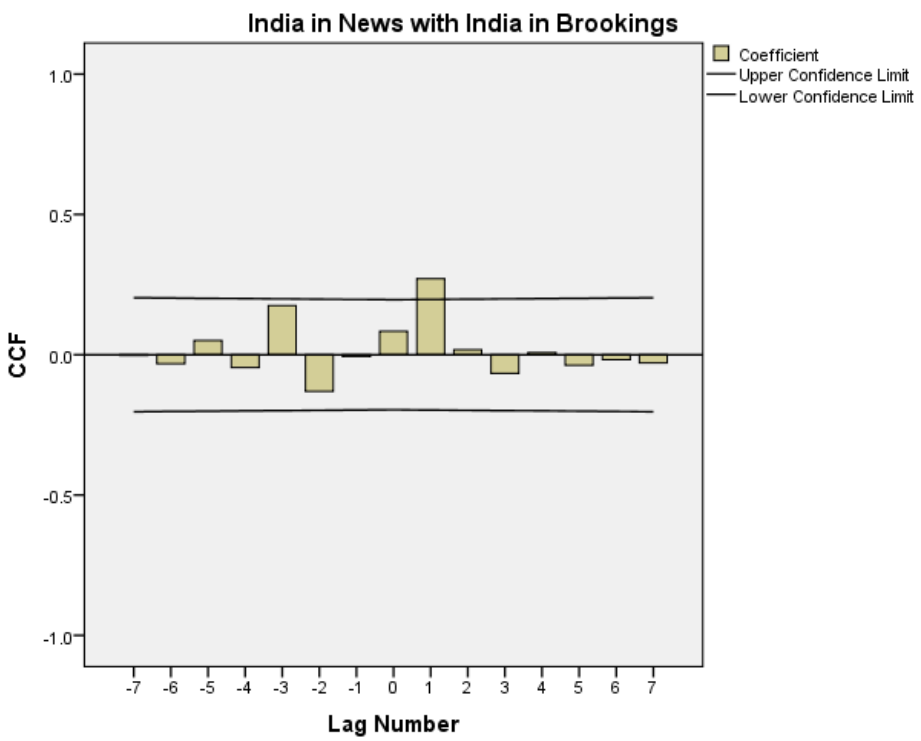
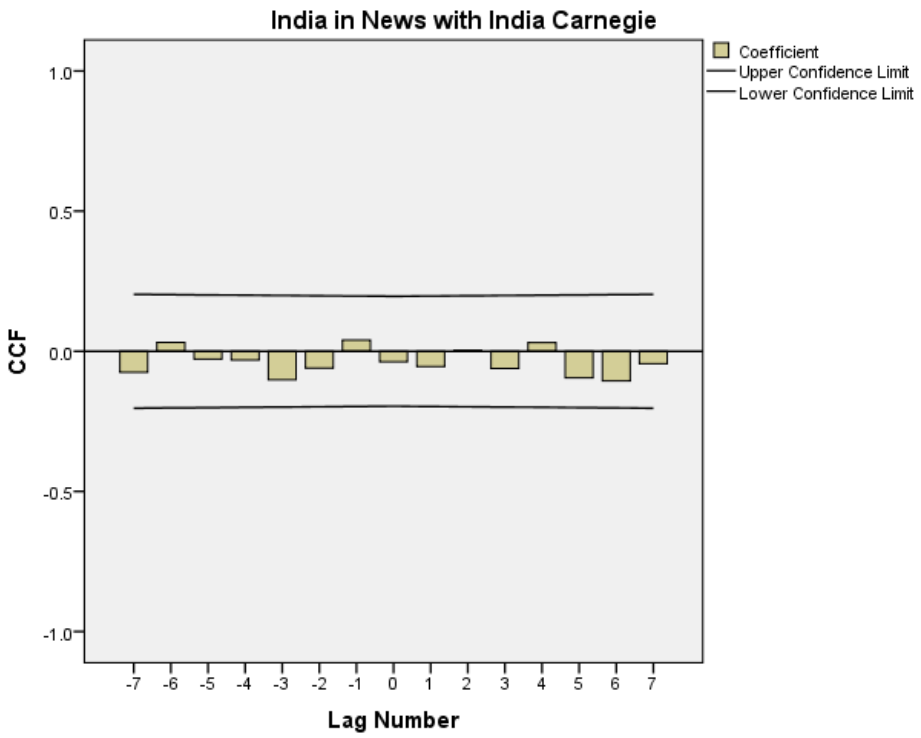
0.5
0.0
-0.5
-1.0
-7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7
Lag Number


India in News with India in Brookings
Coefficient
Upper Confidence Limit
Lower Confidence Limit
CCF
1.0
0.5
0.0
-0.5
-1.0
-7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7
Lag Number


India in News with India Carnegie
Coefficient
Upper Confidence Limit
Lower Confidence Limit
CCF
1.0
0.5
0.0
-0.5
-1.0
-7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7
Lag Number

Appendix D. Autocorrelations in original times series

Autocorrelations in original

Series: Egypt in News, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.667	.097	47.660	1	.000
2	.322	.096	58.868	2	.000
3	.056	.096	59.209	3	.000
4	-.049	.095	59.471	4	.000
5	-.060	.095	59.874	5	.000
6	-.043	.094	60.085	6	.000
7	-.045	.094	60.316	7	.000
8	-.002	.093	60.316	8	.000
9	.038	.093	60.486	9	.000
10	.076	.092	61.169	10	.000

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Egypt in Brookings, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.382	.097	15.620	1	.000
2	.328	.096	27.282	2	.000
3	.129	.096	29.096	3	.000
4	.090	.095	29.984	4	.000
5	.016	.095	30.014	5	.000
6	-.024	.094	30.080	6	.000
7	-.140	.094	32.319	7	.000
8	.081	.093	33.067	8	.000
9	-.034	.093	33.204	9	.000
10	.007	.092	33.210	10	.000

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Egypt in Carnegie, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.553	.097	32.756	1	.000
2	.307	.096	42.917	2	.000
3	.159	.096	45.665	3	.000
4	.045	.095	45.887	4	.000
5	.117	.095	47.419	5	.000
6	.041	.094	47.605	6	.000
7	.115	.094	49.105	7	.000
8	.118	.093	50.706	8	.000
9	-.030	.093	50.813	9	.000
10	.028	.092	50.906	10	.000

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Turkey in Brookings, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.113	.097	1.374	1	.241
2	.188	.096	5.182	2	.075
3	-.041	.096	5.369	3	.147
4	.103	.095	6.537	4	.162
5	-.018	.095	6.572	5	.254
6	.102	.094	7.742	6	.258
7	.053	.094	8.067	7	.327
8	.035	.093	8.203	8	.414
9	.202	.093	12.919	9	.166
10	.053	.092	13.252	10	.210

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Turkey in Carnegie, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	-.028	.097	.085	1	.771
2	-.124	.096	1.734	2	.420
3	.189	.096	5.639	3	.131
4	-.250	.095	12.517	4	.014
5	.160	.095	15.375	5	.009
6	.142	.094	17.632	6	.007
7	-.272	.094	26.059	7	.000
8	.138	.093	28.243	8	.000
9	.016	.093	28.274	9	.001
10	.008	.092	28.281	10	.002

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Turkey in News, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.699	.097	52.341	1	.000
2	.455	.096	74.764	2	.000
3	.403	.096	92.493	3	.000
4	.383	.095	108.635	4	.000
5	.275	.095	117.072	5	.000
6	.223	.094	122.673	6	.000
7	.190	.094	126.764	7	.000
8	.191	.093	130.937	8	.000
9	.172	.093	134.359	9	.000
10	.147	.092	136.909	10	.000

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Pakistan in Brookings, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.101	.097	1.089	1	.297
2	.083	.096	1.841	2	.398
3	-.082	.096	2.572	3	.463
4	.073	.095	3.162	4	.531
5	-.040	.095	3.342	5	.647
6	-.065	.094	3.810	6	.702
7	-.112	.094	5.230	7	.632
8	-.079	.093	5.940	8	.654
9	-.171	.093	9.344	9	.406
10	-.001	.092	9.344	10	.500

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Pakistan in Carnegie, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.137	.097	2.015	1	.156
2	.000	.096	2.015	2	.365
3	.034	.096	2.144	3	.543
4	-.016	.095	2.171	4	.704
5	.212	.095	7.168	5	.208
6	.077	.094	7.842	6	.250
7	-.047	.094	8.095	7	.324
8	.072	.093	8.684	8	.370
9	-.012	.093	8.699	9	.465
10	-.013	.092	8.719	10	.559

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Pakistan in News, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.356	.097	13.593	1	.000
2	.185	.096	17.292	2	.000
3	.085	.096	18.081	3	.000
4	.026	.095	18.152	4	.001
5	.116	.095	19.660	5	.001
6	-.042	.094	19.856	6	.003
7	-.031	.094	19.962	7	.006
8	-.146	.093	22.419	8	.004
9	-.104	.093	23.680	9	.005
10	-.106	.092	24.988	10	.005

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Libya in Brookings, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.355	.097	13.513	1	.000
2	.323	.096	24.773	2	.000
3	.125	.096	26.488	3	.000
4	.141	.095	28.680	4	.000
5	.065	.095	29.146	5	.000
6	.025	.094	29.216	6	.000
7	-.076	.094	29.865	7	.000
8	.104	.093	31.096	8	.000
9	-.140	.093	33.363	9	.000
10	-.114	.092	34.875	10	.000

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Libya in Carnegie, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.257	.097	7.087	1	.008
2	.099	.096	8.155	2	.017
3	.113	.096	9.546	3	.023
4	.064	.095	10.000	4	.040
5	-.080	.095	10.705	5	.058
6	-.138	.094	12.845	6	.046
7	-.150	.094	15.418	7	.031
8	-.052	.093	15.731	8	.046
9	-.021	.093	15.784	9	.072
10	-.113	.092	17.283	10	.068

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Libya in News, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.638	.097	43.594	1	.000
2	.436	.096	64.110	2	.000
3	.340	.096	76.729	3	.000
4	.330	.095	88.734	4	.000
5	.245	.095	95.425	5	.000
6	.041	.094	95.615	6	.000
7	.010	.094	95.626	7	.000
8	.040	.093	95.808	8	.000
9	.056	.093	96.175	9	.000
10	.006	.092	96.180	10	.000

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Greece in Brookings, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.291	.097	9.061	1	.003
2	.234	.096	14.972	2	.001
3	.092	.096	15.893	3	.001
4	.170	.095	19.062	4	.001
5	.080	.095	19.781	5	.001
6	.036	.094	19.929	6	.003
7	-.143	.094	22.244	7	.002
8	-.220	.093	27.798	8	.001
9	-.041	.093	27.997	9	.001
10	.024	.092	28.066	10	.002

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Greece in Carnegie, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.274	.097	8.042	1	.005
2	.212	.096	12.896	2	.002
3	.106	.096	14.111	3	.003
4	.052	.095	14.412	4	.006
5	.061	.095	14.829	5	.011
6	.116	.094	16.353	6	.012
7	.180	.094	20.030	7	.006
8	.136	.093	22.164	8	.005
9	.102	.093	23.365	9	.005
10	-.041	.092	23.565	10	.009

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Greece in News, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.684	.097	50.081	1	.000
2	.544	.096	82.032	2	.000
3	.427	.096	101.967	3	.000
4	.389	.095	118.608	4	.000
5	.364	.095	133.338	5	.000
6	.250	.094	140.369	6	.000
7	.109	.094	141.713	7	.000
8	.035	.093	141.854	8	.000
9	-.014	.093	141.876	9	.000
10	.056	.092	142.245	10	.000

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Japan in Brookings, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.202	.097	4.372	1	.037
2	.208	.096	9.042	2	.011
3	.117	.096	10.539	3	.015
4	.012	.095	10.555	4	.032
5	-.007	.095	10.560	5	.061
6	-.147	.094	12.980	6	.043
7	-.075	.094	13.626	7	.058
8	-.145	.093	16.051	8	.042
9	-.050	.093	16.336	9	.060
10	-.178	.092	20.063	10	.029

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Japan in Carnegie, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.305	.097	9.946	1	.002
2	.282	.096	18.543	2	.000
3	-.011	.096	18.555	3	.000
4	-.188	.095	22.437	4	.000
5	-.175	.095	25.837	5	.000
6	-.162	.094	28.776	6	.000
7	-.087	.094	29.639	7	.000
8	.029	.093	29.733	8	.000
9	-.028	.093	29.824	9	.000
10	.126	.092	31.673	10	.000

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Japan in News, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.495	.097	26.231	1	.000
2	.227	.096	31.807	2	.000
3	.028	.096	31.893	3	.000
4	-.018	.095	31.927	4	.000
5	-.048	.095	32.186	5	.000
6	-.103	.094	33.379	6	.000
7	-.116	.094	34.899	7	.000
8	-.050	.093	35.190	8	.000
9	-.095	.093	36.231	9	.000
10	-.169	.092	39.593	10	.000

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: UK in Brookings, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.127	.097	1.715	1	.190
2	-.041	.096	1.892	2	.388
3	.013	.096	1.910	3	.591
4	.045	.095	2.135	4	.711
5	-.002	.095	2.136	5	.830
6	-.122	.094	3.805	6	.703
7	-.063	.094	4.252	7	.750
8	-.236	.093	10.653	8	.222
9	-.081	.093	11.417	9	.248
10	-.005	.092	11.419	10	.326

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: UK in Carnegie, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.018	.097	.036	1	.849
2	.148	.096	2.407	2	.300
3	-.025	.096	2.474	3	.480
4	-.059	.095	2.862	4	.581
5	.047	.095	3.110	5	.683
6	-.183	.094	6.887	6	.331
7	.075	.094	7.526	7	.376
8	-.126	.093	9.348	8	.314
9	.017	.093	9.380	9	.403
10	.020	.092	9.428	10	.492

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: UK in News, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.830	.097	73.670	1	.000
2	.635	.096	117.203	2	.000
3	.517	.096	146.360	3	.000
4	.502	.095	174.194	4	.000
5	.516	.095	203.885	5	.000
6	.475	.094	229.286	6	.000
7	.419	.094	249.257	7	.000
8	.341	.093	262.601	8	.000
9	.326	.093	274.972	9	.000
10	.311	.092	286.320	10	.000

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: France in Brookings, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.235	.097	5.892	1	.015
2	.147	.096	8.227	2	.016
3	.007	.096	8.232	3	.041
4	.075	.095	8.860	4	.065
5	-.010	.095	8.870	5	.114
6	-.026	.094	8.947	6	.177
7	-.013	.094	8.965	7	.255
8	-.098	.093	10.063	8	.261
9	.083	.093	10.861	9	.285
10	.008	.092	10.869	10	.368

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: France in Carnegie, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.088	.097	.832	1	.362
2	.035	.096	.961	2	.618
3	.016	.096	.989	3	.804
4	-.013	.095	1.007	4	.909
5	.197	.095	5.345	5	.375
6	-.108	.094	6.664	6	.353
7	-.025	.094	6.736	7	.457
8	-.054	.093	7.067	8	.529
9	.018	.093	7.106	9	.626
10	-.003	.092	7.107	10	.715

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: France in News, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.686	.097	50.303	1	.000
2	.507	.096	78.124	2	.000
3	.396	.096	95.279	3	.000
4	.347	.095	108.530	4	.000
5	.374	.095	124.130	5	.000
6	.274	.094	132.566	6	.000
7	.244	.094	139.355	7	.000
8	.178	.093	143.009	8	.000
9	.228	.093	149.062	9	.000
10	.144	.092	151.487	10	.000

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: India in Brookings, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.143	.097	2.191	1	.139
2	.036	.096	2.328	2	.312
3	.071	.096	2.886	3	.410
4	.046	.095	3.122	4	.538
5	.052	.095	3.422	5	.635
6	-.165	.094	6.490	6	.371
7	-.021	.094	6.540	7	.478
8	-.051	.093	6.843	8	.554
9	-.040	.093	7.030	9	.634
10	-.016	.092	7.059	10	.720

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: India Carnegie, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.022	.097	.051	1	.822
2	.013	.096	.070	2	.966
3	-.153	.096	2.614	3	.455
4	-.088	.095	3.471	4	.482
5	.096	.095	4.497	5	.480
6	.000	.094	4.497	6	.610
7	-.041	.094	4.692	7	.697
8	.073	.093	5.308	8	.724
9	.082	.093	6.087	9	.731
10	.005	.092	6.089	10	.808

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: India in News, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.755	.097	61.013	1	.000
2	.683	.096	111.469	2	.000
3	.606	.096	151.584	3	.000
4	.618	.095	193.727	4	.000
5	.598	.095	233.481	5	.000
6	.551	.094	267.692	6	.000
7	.512	.094	297.485	7	.000
8	.460	.093	321.739	8	.000
9	.540	.093	355.562	9	.000
10	.490	.092	383.711	10	.000

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Iran in Brookings, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.124	.097	1.651	1	.199
2	.458	.096	24.347	2	.000
3	.085	.096	25.139	3	.000
4	.283	.095	33.968	4	.000
5	.088	.095	34.829	5	.000
6	.220	.094	40.270	6	.000
7	-.019	.094	40.311	7	.000
8	.084	.093	41.116	8	.000
9	-.076	.093	41.781	9	.000
10	-.023	.092	41.841	10	.000

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Iran in Carnegie, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.093	.097	.918	1	.338
2	.005	.096	.921	2	.631
3	-.043	.096	1.123	3	.772
4	-.098	.095	2.189	4	.701
5	.010	.095	2.199	5	.821
6	.083	.094	2.972	6	.812
7	-.001	.094	2.972	7	.888
8	.135	.093	5.064	8	.751
9	.048	.093	5.328	9	.805
10	-.089	.092	6.258	10	.793

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Autocorrelations

Series: Iran in News, original

Lag	Autocorrelation	Std. Error[a]	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	.752	.097	60.523	1	.000
2	.728	.096	117.815	2	.000
3	.626	.096	160.655	3	.000
4	.619	.095	202.921	4	.000
5	.536	.095	234.879	5	.000
6	.516	.094	264.830	6	.000
7	.535	.094	297.320	7	.000
8	.472	.093	322.903	8	.000
9	.429	.093	344.219	9	.000
10	.348	.092	358.414	10	.000

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Vita

Dzmitry Yuran was born in collapsing Soviet Union and grew up in the Republic of Belarus. Proclaimed the last dictatorship in Europe, Belarus and other post-Soviet countries undergo significant transformations, as they try to build their political systems and claim a place in the global society. Dzmitry has been fascinated for a long time with media effects, particularly the impact news media have in various political systems and cultural environments. The role of mass media play in transitional democracies (exemplified by post-Soviet countries) is of special interest for him. He started his research in political communication field back at Belarusian State University, where his attained his bachelor's degree. He continued with this interest during his master's program and doctoral studies at the University of Tennessee.