

A Social Network Analysis into the David Kelly Tragedy¹

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On July 18, 2003, British scientist and weapons inspector David Kelly was found dead, apparently by suicide. This tragedy capped a two-month controversy over the validity and authorship of an intelligence dossier on Iraq produced by the U.K. government. These events were investigated by a special, independent commission led by Lord Brian Hutton, called the Hutton Inquiry, and its final report was issued in January 2004.

This matter provides an excellent opportunity to study the inner workings of high levels of government because the Hutton Inquiry subpoenaed internal communications and has made them available to the public. From these documents, it is possible to construct the networks of discussion and authority behind the government's actions. An important question in this case is who were the decision-makers that developed the strategy to release Kelly's name to the press. The Prime Minister's Office denied being heavily involved with this process, but the Hutton Inquiry documents reveal otherwise.

This article uses social network analysis to examine internal government communications in the Kelly affair. Social network analysis can quantify the interactions among a group of social actors. It produces measures of actors' power and centrality in a network, and it constructs diagrams, or "network maps," that represent the interactions and relative positions of the actors.

A social network analysis of the Hutton Inquiry documents does not offer any stark, new revelations, because certain documents already made clear that 10 Downing Street was intimately involved in the decision-making. However, this analysis provides a clear visual representation of the coordination among government officials as they confronted a thorny problem. It also quantifies the relative importance of the actors.

This paper begins with a brief background on the immediate controversy over the Iraq dossier and the events leading up to Kelly's suicide. Next I describe the data and methods in detail, then present results, and finally conclude.

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BACKGROUND

The British dossier on weapons of mass destruction in Iraq had been important and controversial since its release in the fall of 2002. However, the immediate controversy that led to Kelly's suicide began on May 29 of 2003, when BBC journalist Andrew Gilligan reported that a senior government official told him the dossier had been "sexed up" at the request of the Prime Minister's Office (PMO). Gilligan specifically pointed to the added claim that Iraq could launch a weapon within 45 minutes. Gilligan's source supposedly gave this as an example of dubious intelligence that was added after the PMO became involved.

Intelligence agencies in the U.K. government launched an internal investigation after Gilligan's report, to find the source of the leak. Publicly, Prime Minister Tony Blair and his spokesmen strenuously denied the allegations that the report had been "sexed up," while Gilligan and another BBC journalist reported further details. The situation escalated into strong criticisms and counter criticisms between Blair's communications director, Alastair Campbell, and the BBC.

David Kelly had met with Andrew Gilligan on May 22. Kelly was a senior weapons inspector, so it was not unusual for him to talk to reporters. However, on June 30, Kelly wrote his superior at the Ministry of Defence (MOD), Bryan Wells, to say he was beginning to think Gilligan might have used that conversation as a source for his reports. Wells, along with the MOD Personnel Director Richard Hatfield, interviewed Kelly on July 4 and again on July 7 to discuss the matter. At the second meeting they were joined by MOD Deputy Chief of Defence Intelligence Martin Howard, who was in charge of the internal investigation about the leak. From his letter to Wells and the minutes of those meetings, Kelly appears very forthcoming, but he did not mention that he had also spoken with two other BBC journalists in late May.

On July 8, the MOD issued a statement that someone had come forward, without giving Kelly's name, and it used Kelly's account to dispute the credibility of Gilligan's reports. The next day, however, MOD Director of News Pam Teare confirmed Kelly's name when it was put to her by a journalist from the Financial Times. Extensive internal discussions, which are documented in the Hutton Inquiry evidence, preceded that action.

Kelly was brought before the Foreign Affairs Committee of Parliament on July 15. After hearing his testimony, the committee issued a statement calling it unlikely that Kelly was Gilligan's source and criticizing the MOD for its treatment of him. Two days later, Kelly committed suicide. On July 20, after Kelly's body was discovered and identified, the BBC disclosed that Kelly was in fact Gilligan's principal source. After Kelly's death, the PMO strongly denied allegations that they had orchestrated the release of his name. Blair said in response to reporters' questions on July 23, "emphatically not, I did not authorize the leaking of the name of David Kelly" (Hoge 2003). Alastair Campbell testified to the Hutton Inquiry that he had not been involved with the naming, either, saying "I emphasize I didn't do anything to bring it about" (Cordon 2003).

DATA AND METHODS

This analysis is based on internal government documents collected by the Hutton Inquiry. The inquiry has a web site (www.the-hutton-inquiry.org.uk) which makes all its evidence available to the public, except documents that are restricted for personal privacy, national security, or legal process protections. A large portion of the available documents are instances or records of communication from one person to another, such as letters, emails, and minutes from meetings. Many of these communications were intended to be internal to the government, labelled "RESTRICTED" and "CONFIDENTIAL."

From the Hutton Inquiry evidence, I considered documents to be relevant for this analysis based on their subject matter and parties of communication. Relevant documents are those which pertain to the effort to identify the source of Gilligan's story or the strategy in response to Kelly's admission that he had met with Gilligan. Accordingly, they are bounded in time from May 29, 2003, when Gilligan's story ran, through July, 2003. As for parties of communication, only persons inside the executive branch had a role in the internal decision-making process, so correspondence with parliamentary committees is not relevant.

Given the nature of the evidence, the communications in this analysis are directional, meaning there is a "from" person and a "to" person (or persons). This requires an inference in the case of meetings—i.e., that all persons at a meeting talk to all others. Thus, I inputted every meeting as a set of directional communications, one from each participant to every other participant.

There were two other simplifying assumptions. Many documents were copied to persons other than the principal recipients, but I did not count these extra links. Also, I skipped persons who appeared only once or twice and were not readily identifiable from the Hutton Inquiry web site or news reports. My assumption was that these individuals held relatively junior positions in the government and were not major decision-makers in this matter.

The social network analysis software used for this research (InFlow) produces network maps using an algorithm ("Kamada-Kawai") that arranges actors according to their links with other actors. A group of persons who communicate frequently with each other are clustered together, while occasional contacts are placed at a distance. However, there is no unique configuration for these maps because they condense an $N \times N$ – dimensional space (where N is the number of actors) down to two dimensions. Still, the clustering of tightly knit groups is usually consistent in multiple maps of the same network.

Numeric measures of actor centrality enhance and clarify the analysis because they provide quantitative estimation of actor positions in a network. Three measures were used: degree, betweenness, and closeness (Freeman, 1979; Krebs, 2001).³

Degree is simply a count of the number of different persons each actor communicates with. Because the Hutton Inquiry documents give directional communications, each actor has two measures of degree—one for communications going out, and one for those coming in. Betweenness measures the importance of an actor as a link between other persons. It counts the number of the shortest communication chains throughout the network that include the actor. Closeness measures the ability of an actor to send information out through the network or receive information back in. It reflects the average number of intermediaries needed to reach other actors or receive their information.

RESULTS

From the Hutton Inquiry documentary evidence, 31 individuals emerge as actors in the Kelly affair. They are listed by government position in Table 1. Two of the actors, Simon McDonald and Joe French, only received one communication each and sent none, so they appear to be only tangential to the decision-making.

³ The InFlow software makes these measures normalized from zero to one. Thus, the reported values are the actual counts for each actor in proportion to the total number of possibilities for that network property. For example, the degrees value for an actor would be the number of other actors he/she communicated with divided by the total number of other actors in the network.

Table 1: Actors in Hutton Inquiry Documents Related to David Kelly

ORG	NAME	POSITION
<i>Prime Minister's Office</i>		
	Tony Blair	Prime Minister
	Jonathan Powell	Chief of Staff
	Alastair Campbell	Director of Communications
	Tom Kelly	Prime Minister's Official Spokesman
	Godric Smith	Prime Minister's Official Spokesman
	David Manning	Foreign Policy Adviser
	Clare Sumner	PMO Staff
<i>Cabinet Office</i>		
	David Omand	Security and Intelligence Coordinator, Permanent Secretary
	John Scarlett	Chairman of the Joint Intelligence Committee (JIC)
<i>Ministry of Defence</i>		
	Geoff Hoon	Secretary of State for Defence
	Peter Watkins	Private Secretary for Geoff Hoon
	Richard Taylor	Special Advisor to Geoff Hoon
	Kevin Tebbit	Permanent Secretary
	Dominic Wilson	Private Secretary for Kevin Tebbit
	Pam Teare	Director of News
	Kate Wilson	Chief Press Officer
	Richard Hatfield	Personnel Director
	Joe French	Former Chief of Defence Intelligence
	Martin Howard	Deputy Chief of Defence Intelligence
	Bryan Wells	Director of Counter Proliferation and Arms Control
	James Harrison	Deputy Director Counter Proliferation and Arms Control
	John Clark	Proliferation and Arms Control Secretariat
	David Kelly	Chief Microbiologist at Porton Down Facility
<i>Foreign and Commonwealth Office</i>		
	Jack Straw	Secretary of State for Foreign and Commonwealth Affairs
	Simon McDonald	Principal Private Secretary for Jack Straw
	Geoffrey Adams	Private Secretary for Jack Straw
	Michael Jay	Permanent Under-Secretary
	Menna Rawlings	Private Secretary for Michael Jay
	Peter Ricketts	Political Director
	John Williams	Director of Communications
	William Ehrman	Director General of Defence and Intelligence (and on the JIC)

The list of actors is not surprising. It includes the chain of command up from Kelly to Defence Secretary Geoff Hoon and other senior officials in the government who would be concerned with a high-profile foreign policy issue. Perhaps the only surprise is the number of officials from the Foreign and Commonwealth Office (FCO) who were involved. This makes sense, however, because the press mistakenly thought that the source for Gilligan's story was an FCO employee.

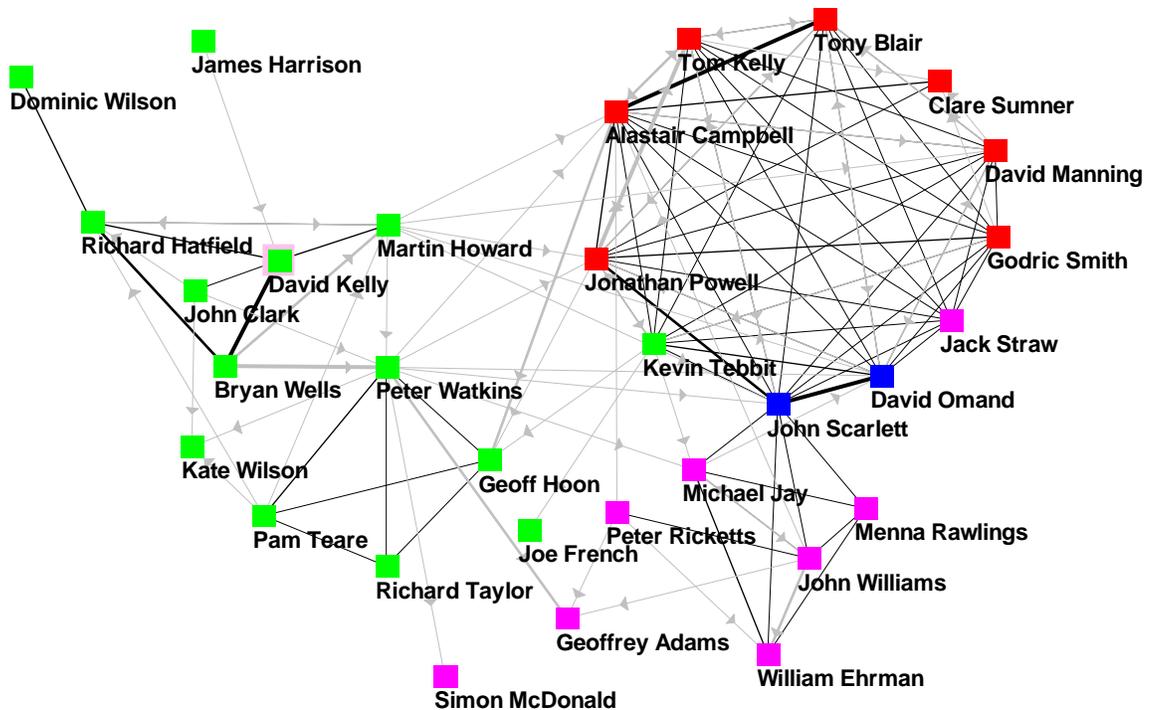


Figure 1: Social Network Map of Communications Related to David Kelly (nodes colored by organization, black links are symmetric).

A network map is presented in Figure 1. It is apparent that the PMO was very active in the Kelly affair, with Jonathan Powell and Alastair Campbell in central positions. Peter Watkins and Martin Howard at the MOD and David Omand at the Cabinet Office also appear as major hubs of activity. The central positions of these actors hold up consistently in additional productions of the map.

As would be expected, the map shows actors mostly clustered by their organization. One exception is that Foreign Secretary Jack Straw is located in the PMO cluster. This aberration is understandable from the data, however, because most of the instances of communication for Secretary Straw come from a meeting with Tony Blair and the PMO staff.

The measures of network centrality refine the picture from this network map. Table 2 lists these measures, with the top five values for each measure in bold. Notably, Alastair Campbell is the only actor who ranks in the top five for all measures of centrality. Also, John Scarlett of the Joint Intelligence Committee emerges as another very important actor with one of top five values in four of the measures, and the same is true of Jonathan Powell. More generally, of the actors with at least one measure scoring in the top five values, four came from the MOD, three from the PMO, two from the Cabinet Office, and one from the FCO.

By examining the measures individually and in comparison, it can be seen that the major actors had different relative strengths in terms of gathering information, giving out information (or commands), and linking other actors. Defence Secretary Hoon did not have a large number of different contacts, shown by degrees, but he was an important link with high betweenness. The same was true of Martin Howard at the MOD intelligence department and MOD Director of News Pam Teare. Alastair Campbell, on the other hand, was slightly stronger in terms of his connections (degrees and closeness) than his betweenness. Not surprisingly, the principals Tony Blair and Jack Straw were not important as links but were well connected for getting information out and in. Finally, Peter Watkins, Private Secretary for Geoff Hoon, gave out more information than he received. This is largely because he sent a key memorandum to Powell, Campbell, Scarlett, Omand, McDonald, and Jay soliciting their advice on how to handle the Foreign Affairs Committee request for David Kelly to testify.

Table 2: Measures of Network Centrality

ACTOR	DEGREES (OUT)	DEGREES (IN)	BETWEENNESS	CLOSENESSES (OUT)	CLOSENESSES (IN)
Geoffrey Adams	0.000	0.097	0.000	0.032	0.161
Tony Blair	0.290	0.290	0.000	0.287	0.148
Alastair Campbell	0.355	0.452	0.167	0.326	0.159
John Clark	0.129	0.032	0.009	0.301	0.112
William Ehrman	0.129	0.161	0.002	0.246	0.145
Joe French	0.000	0.032	0.000	0.032	0.151
James Harrison	0.032	0.000	0.000	0.287	0.032
Richard Hatfield	0.129	0.194	0.113	0.284	0.133
Geoff Hoon	0.097	0.194	0.236	0.284	0.148
Martin Howard	0.290	0.129	0.173	0.365	0.132
Michael Jay	0.161	0.194	0.019	0.248	0.149
David Kelly	0.129	0.161	0.074	0.287	0.123
Tom Kelly	0.323	0.290	0.002	0.290	0.148
David Manning	0.323	0.323	0.016	0.290	0.153
Simon McDonald	0.000	0.032	0.000	0.032	0.144
David Omand	0.290	0.387	0.038	0.287	0.157
Jonathan Powell	0.355	0.387	0.101	0.326	0.157
Menna Rawlings	0.129	0.129	0.000	0.246	0.144
Peter Ricketts	0.129	0.032	0.000	0.274	0.130
John Scarlett	0.419	0.484	0.210	0.304	0.160
Godric Smith	0.323	0.290	0.002	0.290	0.148
Jack Straw	0.290	0.290	0.000	0.287	0.148
Clare Sumner	0.065	0.161	0.000	0.252	0.144
Richard Taylor	0.097	0.097	0.000	0.284	0.137
Pam Teare	0.194	0.097	0.163	0.307	0.137
Kevin Tebbit	0.419	0.290	0.124	0.333	0.148
Peter Watkins	0.355	0.194	0.190	0.352	0.142
Bryan Wells	0.129	0.097	0.015	0.304	0.122
John Williams	0.226	0.161	0.064	0.282	0.145
Dominic Wilson	0.032	0.032	0.000	0.225	0.120
Kate Wilson	0.000	0.097	0.000	0.032	0.147
AVERAGE	0.182	0.182	0.054	0.250	0.140

These measures can be turned back into a network map that shows the “real hierarchy” among the decision-makers in this matter. I ranked the actors by the sum of their betweenness and the average of their in and out closenesses, and positioned them vertically by this rank and horizontally by their organization. The resulting map is shown in Figure 2.

The “real hierarchy” map indicates Geoff Hoon and John Scarlett as the most important actors (Hoon ranks highly because he has the top betweenness value). It also shows Alastair Campbell and Jonathan Powell from the PMO having prominent roles, on par with senior officials at the MOD.

Taken as a whole, the results of this social network analysis support the contention that the PMO officials were misleading when they tried to create the impression that they were not intimately involved with the release of David Kelly's name. Also, this analysis indicates that the political heads of the MOD, *i.e.* Defence Secretary Hoon and his Private Secretary Peter Watkins, had greater influence in the process than did the top civil servant, Permanent Secretary Kevin Tebbit.

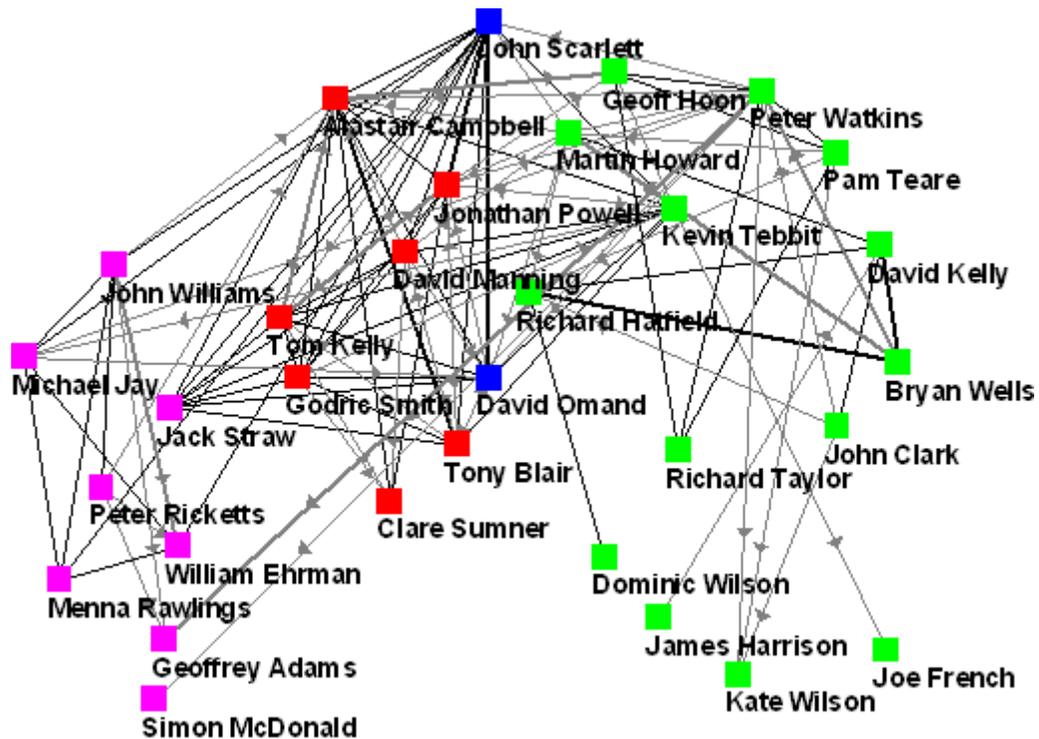


Figure 2: The “Real Hierarchy” (nodes colored by organization, black links are symmetric).

CONCLUSION

When considering the value of this exercise, it is important to recognize two significant limitations of the data. First, the Hutton Inquiry documents do not necessarily provide a representative picture of all internal communications from the Kelly affair. They are not from an unbiased, random sample but rather a collection of preserved communications that the actors consciously retrieved and submitted to the inquiry. Second, this analysis considers the flow of information through a network, not the flow of authority. Although the two are related, it is certainly possible to have a well-connected and well-informed actor who is not calling the shots. Third, the content of the communications has not been analyzed. It could be, for example, that communications in the PMO concerned reaction to the media story and subsequent scandal and is not related to the release of Kelly's name.

Despite these reservations, social network analysis can enhance our understanding of government decision-making in the events surrounding the death of David Kelly. This method synthesizes scores of communications into a form that can be digested as a whole, and it has the potential to add precision to comparisons of different actors in the affair. The results are not surprising, but a clear picture emerges of the central role that the PMO indeed played in this tragedy.

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