THE ROLE OF GREY LITERATURE AND NON-TRADITIONAL AGENCIES IN INFORMING POLICY MAKERS AND IMPROVING NATIONAL COMPETITIVENESS

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Scope and Value of Grey Literature

Grey literature has many definitions. My definition is this: it is all material, in whatever medium and whatever language, that is unclassified in all respects, but published in a limited edition for a limited audience. It is the demilitarized zone, the DMZ, between a national intelligence community in the throes of dissolution, and the "rest of government", including the especially talented National Aeronautics and Space Administration. The vast majority of all published information is "grey literature".

Let me expand on that thought by taking a moment here to list the nine elements of what I call the "information continuum", EIGHT of which are "non-traditional" intelligence elements, and yet much more valuable to the policy consumer than the existing intelligence community!

Imagine a line drawn from left to right. Along that line, forming a continuum, are the nine sectors of national and international knowledge: K-12, universities, libraries, businesses, private investigators and information brokers, the media, the government including state and local, the Department of Defense with all its dollars, and the intelligence community.

K-12 and university research papers, special library collections, internal business libraries, private reports, the unpublished results of investigative journalism, government files, and defense technical information--taken together I would speculate that these predominantly open sources vastly outweigh traditional intelligence community products both in quantity and quality. The kicker is that these non-traditional products are also much more useful to the policy maker, if processed properly, because they can be shared with others.

There is another point to be made here. The "information continuum" feeds into what Lee Felsenstein at the Interval Research Corporation calls the "information commons". My judgement is that the information commons is roughly ten per cent electronic, twenty per cent hard copy publication, and seventy per cent grey literature. The Internet, now much in vogue, is less than ten per cent of the electronic world, or one one hundredth of the available information.

The number of people in the world who are still limited to Royal typewriters and hand-held writing instruments--or oral transmission--is unlikely to change radically in the next 20 years. In fact, as we move into a period of transnational tribal warfare, the importance of non-electronic grey literature--indeed, the importance of non-recorded grey literature--is likely to increase dramatically.

Although some of you have done well at getting a good grip on what we traditionally call "grey literature", at least in certain narrow scientific & technical arenas, I would suggest that we have a long way to go--more on that in a moment. Right now, while discussing scope, I want to focus on an expanded definition of grey literature--what I call pre-publication grey matter.

At OSS '92, my first international symposium last December, one of our participants, Alessandro Politi, first developed this concept with his reference to the "intelligence minuteman". I pursued this with the idea of "real-time mind-links". So the point I want to make here is that those of you responsible for grey literature collection should never forget that at the root of any kind of intelligence is the source--the human--and that your ultimate responsibility is to identify those individuals who are doing creative thinking in every discipline. Grey literature, like the more traditional intelligence disciplines of HUMINT, IMINT, and SIGINT, is nothing more than a bridge between the question being asked by the policy-maker, and the answer being offered by an inevitably human source. In the Age of Information and information warfare, the winner will be the entity which shortens the feed-back loop, multiplies the collection points, and provides individual decision-makers at every level in both the public and private sector with responsive, decision-aiding intelligence.

Allow me to elaborate on this for a moment. We all recognize that grey literature is labor intensive. I want to emphasize that it is not only labor

intensive in its collection, but also in its analysis. "To know is not to understand". The subtleties of knowledge reflected in grey literature are far more taxing to analysis that the more obvious connotations of imagery, signals, or even directly acquired human intelligence. Managers in both the traditional intelligence organizations, and the non-traditional organizations, do not, in my opinion, recognize either the value or the cost of grey literature.

There is another point that is fundamental to your role as the inheritors of the mantle once worn by the clandestine services and the technical intelligence specialists--grey literature, or grey matter, is intelligence in the purest sense of the word: it is tailored to a specific audience, it is generally responsive, it is--if you will--hand crafted. Thus, anyone who is involved in obtaining grey matter, and processing that grey matter to meet the needs of a specific decision-maker, is in fact in the business of intelligence twice over-- both at the source level, and at the production level.

Let me make a point on citation analysis, because this bears on the utility and relevance of grey literature to decision-making. I was talking to Olivier Schmidt the other day--he is the editor of an international intelligence newsletter--and learned something interesting. He distinguishes between four groups in the grey literature arena:

-- Those who are connected to one another but not influential, i.e. divorced from practical applications, constitute the "ivory tower".

-- Those who are influential but not connected to one another, citing others without producing original material themselves, constitute the "bandwagon". Most journalists fall in this category.

-- Those who are connected to one another an influential constitute the mainstream. The downside of the mainstream is that it tends to reflect the conventional wisdom.

-- Finally, and this I found most interesting, there is a small group of people who are neither connected to one another nor influential, but who are in fact the "up and coming" leaders across all disciplines.

I would put it to you that the challenge for those specializing in grey literature, and for those non-traditional agencies interested in providing

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decision-makers with the best available intelligence, that it is this last group which represents not only the greatest degree of difficulty in gaining access, but also the greatest potential value to decision-inducing intelligence. The intelligence community is not trained, equipped, and organized to go after this group.

Acquiring and Processing Grey Literature

Although it is fashionable to focus on Japan and on the Commonwealth of Independent States, this is a very limited view. Martin Van Crevald, Joel Kotkin, and others have clearly articulated the importance of tribes and cultures as the dominant focal points for organizing human activities in the near future. The Japanese are unique for having a culture and a state that are one; the Chinese, the Moslems, the Jews, the Indians, the Mormons, and the Anglo-Saxon tribes are all transnational in nature, with enclaves well established within other nation-states including our own.

What is boils down to is this: it is not enough to acquire a piece of foreign grey literature. If you do not have the cultural context, the cultural understanding, within which to interpret that piece of grey literature for the policy-maker, then all you have is a trinket with "Made in Japan"--a trinket that is of no intelligence value. There is no more important area of interest in the next ten years, than that of cultural grey literature--religious documents, tape recordings of sermons, manifestos from criminal gangs, and so on. This will hard for some from the scientific and technical community to accept, but the reality is that in the grey literature arena, culture has replaced S&T as the number one target.

One of the reasons I think the Foreign Broadcast Information Service is so valuable is the fact that it brings together language and analysis skills in a way that is not typical of the rest of the intelligence community. That is the good news. On the other hand, FBIS is forced by circumstance to use classified computers and classified processing "methods" including security procedures, which dramatically reduce the dissemination and utility of its work. It's excellent products are wrapped in a "cement overcoat", courtesy of a petrified security system. When I look at what FBIS has to offer, and I look at similar institutions outside the intelligence community, such as the Monterey Institute of International Relations, and the thousands of hours of translation funded by the private sector to process foreign political, economic, and

scientific & technical information, I can only conclude that FBIS, if it is to reach its full potential as a producer while also leveraging the efforts of non-traditional elements outside the government, must itself be freed from the constraints of being "behind the green door". FBIS needs to be an open agency, independent of the intelligence community.

Quick and Easy Access to Grey Literature

Quick and easy access to grey literature is a contradiction in terms. If it were easy it would not be grey. Recall the nine sectors of the information continuum. Between each of these sectors is an iron curtain. Between each institution in each sector there is a bamboo curtain. And finally, between each individual in each institution, there is an plastic curtain. There is nothing quick and easy about grey literature. Acquiring grey literature, and gaining access to the individuals behind grey literature, in the greatest intelligence challenge of all.

Governments, for all their failings, remain the single most organized element of the international community. We need to move rapidly toward a broad range of burden-sharing agreements with other governments. Such agreements should focus on the sharing of encyclopedic intelligence, to include grey literature. Governments in turn can serve as focal points for harnessing the collection and processing power of their corporations and universities. In June and July I met with flag officers and corporate directors in France, Italy, Sweden, and England to discuss, among other things, the idea of allied burden sharing in the unclassified arena. I found them uniformly interested in the idea of converting the North Atlantic Treaty Organization, or the European Economic Community, into information alliances.

Alternatively, as the privatization of intelligence proceeds apace, selected organizations will so master this arena that they will turn their information into a first class commodity, and will be able to barter grey literature in return for money, real estate, labor, and other trinkets.

Intellectual Property Issues in Grey Literature

I am not a lawyer, but I want to describe to you my concept for resolving the intellectual property issue in the cyberspace environment. Essentially I propose to use software created for security purposes, and

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specifically Central Intelligence Agency software, in order to test and support an electronic clearinghouse function.

It is clear to me that we will not establish an alternative paradigm for intellectual property until we have an alternative economic model, and that we will not have an alternative economic model until we have a software that can support this model.

I propose we move to a "compound interest" model rather than a "single point of sale" model for compensation of those who originate information or provide added value.

In my view, the software exists to support such a model. A single piece of intellectual property can be recognized by the software as it is called up, printed, copied, forwarded, and extracted from. A penny for each extraction or call up; a dime for each printing; a dollar for each forwarding. There is no doubt in my mind that such a model will provide two things of value to society: a real reward for originators of knowledge; and a real incentive for all to produce knowledge that is usable by others, not knowledge as artifact.

New Techniques and Technologies

As a former member of the Advanced Information Processing and Analysis Steering Group, of the Information Handling Committee, and of the Artificial Intelligence Staff at CIA, I have a fondness for technology. I highly recommend the AIPASG conference in March. However, I think we all need to focus on the human aspect of grey literature, and avoid like the plague any technical panaceas, or "false gods".

We must move "beyond technology" and focus on CONTENT and on CULTURE. I am very concerned that intelligence professionals--like the telephone company operators--are being micro-managed into keyboard counts, and judged solely on the number of letters entered into the system, not on the quality of the date entered nor the knowledge that results from the analysis of that data. Analysis takes time. It take reflection. Any organization that does not plan for analysts spending at least one third of their time REFLECTING, is simply not serious about its intelligence function.

Having said that, I want to commend to you all one system in particular, and that is the PROMETHIUS system being brought to market by TRW/ESL. Diane Webb, who developed this system in the Office of Scientific and Weapons Research at CIA under the leadership of Gordon Oehler, is now in the private sector, and it is my judgement that this is the single best system for entering data, applying artificial intelligence at the lower levels of functionality, while also providing the analyst with a fully integrated toolkit for handling multi-media multi-lingual data. Diane can be reached at (408) 752-2383. Let me repeat that--(408) 752-2383.

Issues and Policies--Information Trends in the Clinton Administration

God Bless Al Gore--but the bottom line is that the National Information Infrastructure is all connectivity and no content. Elsewhere I have presented my views on the desperate need for a national knowledge strategy--a strategy of "National Engagement". I will summarize this strategy here. In addition to what I call the 1st C, the C of connectivity which Al Gore is providing, we need four other "C's.

The 2nd C is that of CONTENT. Right now cyberspace is mostly noise. It is imperative that all organizations which are in the business of collecting and processing unclassified information focus on the value of this information as a COMMODITY, and endeavor to introduce and barter their information within the information commons. Grey literature is among the more valued aspects of information, for it is timely and tailored by definition.

The 3rd C is that of CULTURE. Without belaboring the point, the fact is that cultural ignorance in the Age of Information is indeed fatal. Bean-counting is dead. We are entering an era in which cultural nuances can spell the difference between survival and extinction. We must pay attention to culture, and nurture analysts capable of cultural intuition. One way to do this is to integrate our now isolated ethnic enclaves into a larger electronic community, and to nurture culturally-astute "centers of excellence" which are fully exploitable online by FBIS and others.

The 4th C is that of COIN, or research & development dollars. I will not belabor the point, but will note that it is my judgement that the intelligence community is wasting at least $100 million a year diddling with end-user computing applications and configurations, and that the total loss for the

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United States in this area alone the order of $2 billion a year. We can no longer afford this kind of waste, not only within the intelligence community, but across the government and across the information continuum of the Nation.

The 5th C, the last C, is C4 SECURITY. This point might be of little interest to all of you, until I point out that your livelihoods could be destroyed in a moment by the interruption of services to your enterprise or your organization. The American information enterprise, like information enterprises the world over, is a home constructed over a sinkhole. Most of you have NO IDEA how incredibly vulnerable our communications and computer systems are to random attack by relatively poor and unsophisticated terrorists. This is the "Chernoble" of the Information Age, waiting to happen, and I expect it to happen with frequency in the next few years..

Now let me conclude with a call to arms, if you will. The Foreign Broadcast Information Service is but one of the elements of the intelligence community which has been dedicated to open sources. Others include the Domestic Collection Division of the Directorate of Operations (whatever it is called these days), and the vast amount of dollars spent by the Directorate of Intelligence and other elements of the intelligence community on what we quaintly call "External Research & Analysis" or ER&A. It is my judgement that the total intelligence community budget in the open source arena runs toward two billion dollars a year, and that the total U.S. government budget for open source exploitation runs toward ten billion dollars a year.

Who is in charge? NO ONE. This is an area where the Vice President, as the de factor Chief Information Officer of the Nation, should focus. Such a focus by the Vice President would lead to enormous savings and a consequent increase in our national security and our national competitiveness. In the absence of leadership from the Vice President, I look to workshops like this, and to organizations like CENDI, ably presided over by Kurt Molholm from the Defense Technical Intelligence Center, to establish broad alliances among non-traditional intelligence organizations--alliances that cross both the sectoral and institutional boundaries that I have discussed, as well as international and cultural boundaries.

Elsewhere, in a bill drafted for Congressman Calvert from California, I have proposed the creation of a National Knowledge Foundation, funded at a level of one billion dollars a year, in order to nurture a distributed "virtual"

intelligence community. It is not my intent, in proposing this organization, to undermine the intelligence community. On the contrary, I firmly believe in our intelligence community, but I also believe that it is atrophying, and that we cannot meet the challenges of this century unless we leverage the intelligence collection and production capabilties of the entire national and international information continuum. In my judgement, the allocation of one billion dollars a year to a National Knowledge Foundation would bring to the government the fruits of a $10-20 billion a year "virtual" intelligence community comprised of our schools, businesses, investigators, journalists, and others.

We in this room need to TAKE charge, and develop a global grid that is focused on two things: improved access to content and the human experts behind the content; and improved support to a much broader base of intelligence consumers than the intelligence community will ever acknowledge. In this way, we in this room, and those associated with the AIPASG tools conference as well as my own international symposium on Open Sources, can create a "virtual" intelligence community which focuses on open sources, on open systems, on the inclusion of all elements of the information continuum, and on the sharing of intelligence. This is how we will assure our national security and our national competitiveness in the Age of Information.

Ex Veritas Potens.

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