

Strategies—Good and Bad—for Navigating Information Hyperabundance

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“[The speaker’s introduction] recalled for me a project that I did in 1975, which was to compile a list of what we knew about Chinese periodical publications. We didn’t necessarily have them, but we had some reason to believe they existed. There were 73 publications on that list.”

Dr. Thomas Fingar, DDNI (Deputy Director of National Intelligence)/Analysis [August 21, 2006](#)

STRATEGY ONE: I’M DROWNING IN INFORMATION, SO PLEASE GIVE ME MORE

Dr. Fingar made the comment above to highlight the challenges that “the explosive growth of the amount of information that is out there” now present to the analytic and policymaker communities—as illustrated by the fact that official [People’s Republic of China \(PRC\) statistics](#) from 2003, the last year they were published, put the number of China’s periodicals at 11,193. However, although Fingar did not say so, there is some chance that his project thirty-one years before may have been driven, in part at least, by the intelligence community’s recognition that there was already *too much information*.

In 1976, the [Church Committee Report](#) (here as [photocopies](#) and here as [searchable text](#)) had [observed](#) that “not only are analysts swamped with information, but the consumers also are inundated with intelligence reporting, both ‘finished’ and ‘raw.’ The volume of paper degrades the overall effectiveness of the product, since there is simply too much to read, from too many sources.”

Indeed, according to an internal Central Intelligence Agency (CIA) “[study of studies](#)” done the year before Fingar’s project, the “information explosion” had been identified—*using*

The contours of diplomatic engagement are changing rapidly, as are the environments in which diplomacy is crafted, honed, and practiced. New media have changed the pace and content of political awareness and provided new tools for diplomacy.

Every global issue now tests the assumptions and practices of traditional diplomacy. Non-state actors—whether benign or malign, constructive or disruptive—now play increasingly important roles in the conduct of international politics and lead us to think differently about global development, conflict, and reconciliation.

These issues, conditions, and actors are helping to refine, and perhaps redefine, what diplomacy means, how it is conducted, and how we examine the new terrain of diplomacy.

*that term*¹—as a problem as early as the “mid-1960s.”

Both the Church Commission and that internal study singled out one work in particular, the Cunningham Report, for having noted in 1966 that “the CIA was collecting too much information, and that, failing to get important information, it was flooding the system with secondary material” so that “the volumes of information were degrading production, making the recognition of significant material more difficult in the mass of the trivial.” One consequence, [according to the Church Committee](#), was that “the CIA’s sinologists were so immersed in the large volume of . . . reports on Communist China in the early 1960s that they failed to consider adequately the broader question of the slowly developing Sino-Soviet dispute.”

Thus, as paradoxical as it may seem, the Cunningham Report’s use of the phrase “failed to consider” means that Fingar’s task may have been part of an effort actually to find *more* information sources in an attempt to avoid any further such “failures.” The Church Committee cited several previous reports that [had found](#) that the intelligence community response to all problems and shortcomings tends to be the “strong presumption that additional data collection rather than improved analysis will provide answers to particular intelligence problems.” Nor was it just the analysts who sucked in information in their pursuit of what the Cunningham Report [had dubbed](#) “the jigsaw theory of intelligence,” the search for the “one little scrap” that might prove to be “the missing piece.” Consumers of information were [also faulted](#) for treating intelligence products as a “free good,” so that rather than articulate priorities, “they demand information about everything.”

Looked at in another way, all these reports argue that, even forty-five years ago, official Washington was aware that its problem was not that it had too little information, but rather that it had no way of knowing whether or not it had the information it needed, nor did it have a way of being confident that it could

1. In 1949, Willmoore Kendall characterized the analyst’s daily task as coping with a “flood of information,” suggesting the problem was always bad. See *World Politics*, 1, 4 (July 1949): 542–552.

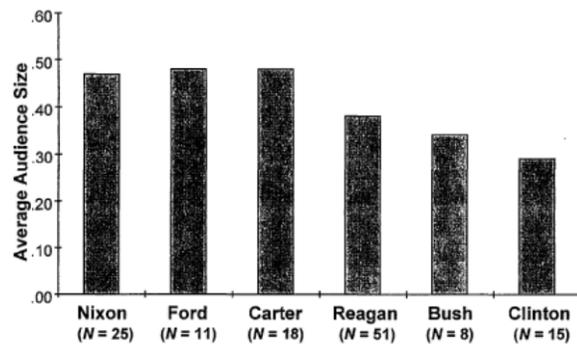
find the bits it needed, among all the other bits that it didn't. Self-defeating though it might be, because that assumption leads to building collection systems that Fingar characterized as "vacuum cleaners on steroids," the drive to get ever more information is a logical response in a system where the "[fear of being accused](#) of an 'intelligence failure'" makes analysts and policymakers alike feel "that they *have* to cover every possible topic, with little regard for its relevancy to U.S. foreign policy interests."

**STRATEGY TWO: NOBODY LISTENS TO ME,
SO I WILL HAVE TO TALK MORE**

Just as agencies that rely on collecting and analyzing information have responded to perceived performance failures by trying to take in even more information, so have organizations that broadcast the information responded to what they perceive to be diminishing influence, or audience, by trying to push out even more information. The government is a massive producer of information, most of which is in the form of data—transcripts of hearings, texts of laws, budgets, patents, court findings, and so on. Although a tiny percent in comparison to the flood of data, publications, broadcasts, and other activities intended to influence public opinion and behavior also constitute a huge part of what government does. Every government office and agency has long had a press office, or an office of public affairs, but [mandates for "e-government"](#) and [transparency](#) have pushed agencies also to set up websites, [Facebook pages](#), [YouTube channels](#), [Flickr albums](#), and [Twitter accounts](#). Even the National Security Agency (NSA), once a paragon of reclusiveness ("No Such Agency") now has a [public website](#) (although, be it noted, the newest research document they [offer there](#) is more than seven years old).

However, no one seems to have tried to calculate whether or not this information reaches an audience, let alone whether or not it has an effect. Some scholars had noted in the mid-1990s that presidential TV appearances were drawing ever

FIGURE 1. Average Percentage of Households Watching Prime-Time Presidential TV Appearances, 1969–98



Source: Nielsen Media Research.

Note: "Average Audience Size" refers to Nielsen's measure of Average Audience Household (AAH), which is the percentage of households owning televisions that are tuned in to an average minute of a given program.

smaller audiences [see chart at left, from [this study](#)],² and there is a robust body of study on the efficacy of government-supported public health campaigns [examples [here](#), [here](#), [here](#), and [here](#)]. In what may be another measure of attention paid to government information, [one study](#) (in 2009) found that only 1.7 percent of U.S. Internet traffic goes to government websites.

After the terrorist attacks of September 11, 2001, government attention turned to the realm of public diplomacy, because the attacks, and the subsequent discovery of [widespread antipathy](#) to the United States, were

seen to have been caused by (in the [words of one study](#)) "a system [of public diplomacy] that has become outmoded, lacking both strategic direction and resources." As a [Government Accountability Office \(GAO\) study](#) of public diplomacy efforts noted, however, most of the attempts at measurement focused on output (that is, how many activities took place rather than how many people attended or took part) and also relied heavily on anecdotes, rather than harder data, as "measures of effectiveness."

The exception to this general indifference to audience measurement was in broadcasting to foreign audiences, which had

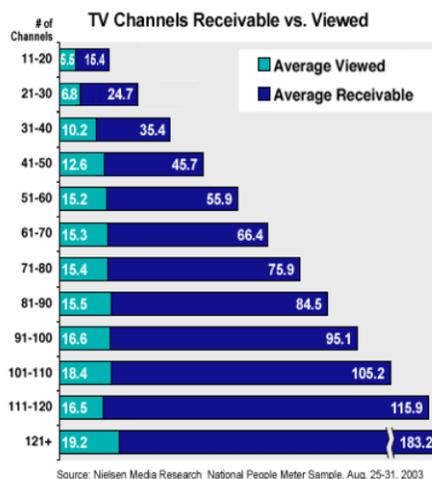
2. It is worth noting that the trend indicated here continues—despite the fact that President Obama's appearances are now carried on ten outlets, rather than the three that the presidents in the chart enjoyed, President Obama's six appearances from February to September 2009 [averaged 22 percent](#) of the possible total viewing audience. Collected data for President Bush do not seem to be available, but accounts suggest that viewers generally were not attentive to his appearances. See [here](#) and [here](#) and [here](#).

been a core part of U.S. outreach efforts since the early 1950s. In 1999, after the end of the Cold War and the dissolution of the U.S. Information Agency ([USIA](#)), the task of broadcasting to foreign audiences³ fell to the [Broadcasting Board of Governors](#) (BBG), which quickly proved to be the subject of multiple [political battles](#). One consequence of that contentiousness has been that measurement of the activities of the BBG’s holdings, particularly [Radio Sawa](#) and [Alhurra TV](#), both of which target the Arab Middle East, has also become highly controversial. As at least [one scholar has noted](#), there has not been any attempt to determine whether the BBG stations are influencing thought or opinion in the region, because even simple measurement of audience size has proven to be so hard to do [pro [here](#), con [here](#)].

It is quite possible, however, that it is not just the difficulty of measuring audiences that has made government bodies reluctant to do so, but also the suspicion that no one will like the answers that they might find. This has to do not just with the much-publicized [general dissatisfaction with government](#) but even more so with the fact that any numbers obtained are likely to look unimpressive.

One of the effects of the parabolic growth of information that has been most difficult for all senders of information to adjust to is that the mass audiences of the past are now gone. As noted in a previous essay, the amount of information produced so far outstrips the ability of humans to pay attention to it that every new entrant into the information bazaar is in effect competing not only with all the other entrants, but even with itself—a process that has been dubbed “[cannibalization](#).” This is illustrated by the chart at the right, which shows how a ten-fold increase in the number of TV channels that a household can receive results only in a four-fold increase in the number of channels actually watched on a regular basis. It is this phenomenon that explains such apparent paradoxes as, for example, that the [largest U.S. TV audience](#) ever gathered (for Super Bowl XLIV,

isd working papers in new dipomacy



Note : Homes receiving 10 channels or less not shown

Updated on Monday, March 22, 2004

3. The [Smith-Mundt Act](#) (1948) forbids the State Department to target information at the U.S. domestic audience.

on February 7, 2010) was nevertheless [less than one-half](#) of the overall audience on that day.

***STRATEGY THREE: ASK A QUESTION,
THEN TRY TO ANSWER IT***

In any presentation on the volume of information that humans now produce there always comes a moment when someone notes that, indeed, there is a lot of information, “and most of it is junk” (or more graphic words to the same effect). Although the junk/not-junk issue is simply a variant of the [signal-to-noise](#) problem, the habits formed when information was much more difficult, and more costly, to disseminate make it difficult for senders and receivers alike to cope with the consequences of it now being possible for [almost everyone on the planet](#) to compete with everyone else for global attention. As explained in a previous paper, the information gatekeepers of the past have been overrun by cheap and abundant information. Thus, analysts can no longer rely upon the fact that something has made it into print, or onto TV, to mean that it is important, just as the fact that the U.S. government, or some other important, authoritative entity puts out information is no guarantee that the intended audience, or anyone else, will pay that information any attention at all.

Even though the Church Committee was already calling into question thirty-five years ago whether it is possible to collect “everything,” the general default position, as that report and others suggested, was to assume that, given the money and the technical ingenuity, it could be done. This is reflected in the fact that the intelligence cycle—the process by which information is said to be transformed into “intelligence”—begins with a matrix of issues, countries, and other topics that are supposed to guide collectors as they go about pouring information into the system. The result, as Dr. Fingar noted in [another speech](#), is a grid that has about 9,100 “collection requirements,” of which more than 2,300 are classified as “priority.”

Those collection categories are often referred to as “the intelligence questions” but, tellingly, these in fact are category

names that provide a taxonomy for sorting information by topic rather than for sorting it by utility. Under the present system, a collector presented with two pieces of information on “Country X” or “Topic Y” has no way of determining whether one is more useful than the other—and thus has every incentive to embed both into the system. It is easy post facto for a Cunningham Report to charge that “secondary material” is being substituted for “important information” or that someone has “failed to connect the dots” (whether in the [intelligence community](#) or [at Toyota](#)), but in fact—given an information collection system that relies upon topics—there are only two ways in which “noise dots” can be separated from “signal dots”: the system can wait until something happens (thus weighting the “dots” after the fact) or the dots can be separated into “probable noise” and “possible signal” *by the act of asking a question*.

Stepping from taxonomic collection to attempting to answer a question requires that those using the information move beyond the information itself to the further dimension of how that information is contexted. There are a number of ways in which that can be done, but one of the most effective was [proposed in 1948](#) by sociologist [Harold Lasswell](#). In his famous formulation: “A convenient way to describe an act of communication is to answer the following questions:

- Who . . .
- Says What . . .
- In Which Channel . . .
- To Whom . . .
- With What Effect?”

Lasswell’s formulation subsequently fell out of favor because it concentrates almost entirely upon output, making the easy but unprovable assumption that the link between message sent and effect achieved is measurable. If however, the model is taken to describe only an *attempted* or *intended* act of com-

munication, the Lasswell formula still provides a powerful tool for sorting information. Applied with thought, the formula is also a good tool for shaping communication efforts to at least increase the likelihood that a given attempt would be, if not effective (since that remains almost impossible to measure), then at least noticed.

It is beyond the scope of this short paper to examine in detail the various methods by which Lasswell's five questions might be answered. It is worth pointing out, however, the larger dimensions of what those answers might offer. The question of **who is sending** the information has long been the most frequently asked question, because (as has already been noted) the ability to send information was until quite recently one of the hallmarks of authority and membership in the elite. Thus, [propaganda analysis](#), one of the classic World War II-era methodologies for doing open source intelligence, used the framework to generate inferences about the intentions of the Soviet and Nazi governments—the senders of the propaganda that the analysts were studying. That analysis also required the study of what was said and where, but the purpose was to try to understand better the people responsible for sending the information.

To be sure, the same purpose may obtain today, if the question an analyst is seeking to answer is “what is the official government statement on X?” Unlike the past, however, the information environment now makes it possible for analysts to ask much more fine-grained questions. What are opposition newspapers or TV saying? What is the financial community saying? In many countries (though not all), it is possible to be even more fine-grained still—what are [political bloggers in Sweden](#) saying? What about [new mothers](#) in Arkansas—what are their concerns? Or British [fishermen](#)—could their concerns be important? How about [thirty-somethings in Cuba](#)?

In the past, such questions were impossible to answer but, even more importantly, the strength of governments was such that most analysts assumed that there was little point even in asking them, because the central governments were so strong that their announced intentions would prove in the end to be

the same as reality achieved. The growth of alternative information, however, has made it increasingly clear that government and other elite voices, for all their strengths, are nevertheless just part of an entire range of voices, nearly all of which can now be accessed by anyone who cares to do so. Thus the question “what do [government officials say](#) about the referendum on minaret construction in Switzerland?” is no longer the same question (as it may once have seemed) as the question “what constituencies in Switzerland support minaret construction?”

Answering Lasswell’s second question can prove even more complicated. Again, propaganda analysis was based upon observing the stock formulae that leaders and media in totalitarian societies used to describe reoccurring events and how those changed over time. In some cases, a change in terms could signal that there had been a [change in government policy](#), in others that there might be a [change in personnel](#). In more open times, and with more open governments, answering the question of **what is said** can be perfectly straightforward, as official newspapers or press agencies release communiqués (although this does not mean that analysts or officials will take them [straightforwardly](#)). There is another level, however, at which analysis of the content of a message can be profoundly valuable. Although the notion of [rhetoric](#), or the art of shaping a communication in order to capture and hold the attention of an audience, has fallen into disrepute in the West, studying the way in which a message is put together can prove enormously valuable for answering particular kinds of questions. Western government officials in particular have a strong belief that factual arguments will sway audiences, as, for example, recent [disputes about sales of US beef in Korea](#) (results [here](#)). Extensive research shows, however, that the meaning of “fact” varies widely among peoples but, even more importantly, people generally only accept as “fact” the things with which they are already in agreement. Nor are discussions always what they may seem to outsiders—western observers have tended to dismiss the fact that a large portion of the Persian-language blogosphere is [devoted to discussion of poetry](#), because they presume that the discussion has nothing to do with politics or daily life, little realizing that

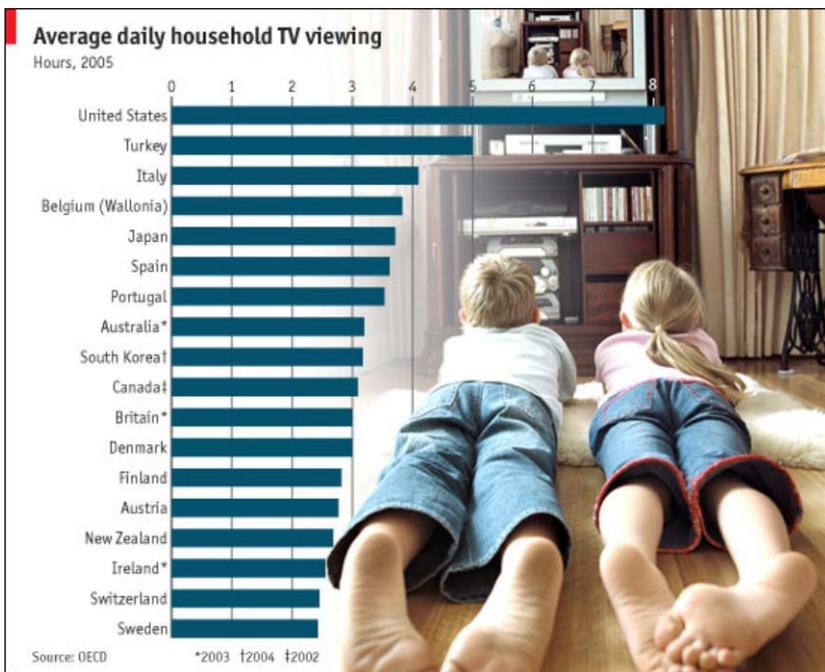
such discussions can actually cut [directly to the heart](#) of what it means to “be Persian.” Indeed, even the simple fact of writing Persian as people speak it every day, rather than as the high-flown language normally reserved for writing, can itself be a [kind of political act](#).

When Lasswell wrote, the question of **which channel** meant essentially whether the statement of interest had been in the main party newspaper or in a more obscure journal known to be a venue for floating trial balloons. That type of broadcasting remains and can have significance, but the appearance of all the many forms of niche-casting makes the issue of the choices that a message-sender makes for a given message a potentially important question. A government proclamation published in the English-language publication of a non-English-speaking state is quite different from one published in the native language.

Perhaps even more basic, *anything* published in a country that has high rates of illiteracy already has a clearly defined target audience and intended effect.

It might even be argued that *anything published anywhere* has a limited potential audience, as the circulation of newspapers almost everywhere continues to shrivel. Even Japan, which had been an exception, has recently [begun to see shrinking](#) readerships as well as predictions that [circulations will collapse](#) when the country’s elderly eventually leave the scene. Everywhere save in sub-Saharan Africa, TV is in the ascendancy, with people even in “low TV” countries spending nearly three hours per day in front of the set [see [graphic](#) at left].

Unsurprisingly, the bulk of those hours are spent on entertainment, meaning that once-dominant “official views” can increasingly be challenged by simple entertainment, as for example in Afghanistan, where a newly flourishing private TV industry has challenged views of [gender and other](#)



[proprieties](#), or in the Middle East, where a [Turkish soap opera](#) can overturn the notion of what a good wife should be. Another “channel” that would-be communicators might choose is cellphones, whether as calls or, more frequently, as texts. These can be used by government to warn people away from areas or particular behaviors, or they can be used by people to pass information that the [government doesn’t wish](#) them to [pass](#).

Perhaps the largest change from the broadcasting of the past is that the issue of *to whom* a message is addressed can be much more tightly controlled than it was in the past. It has recently become fashionable to be skeptical about the impact of social media on political environments, but evidence suggests that, at the very least, governments were taken by surprise by protests organized entirely or in part via social media in [Colombia](#), [China](#), [Iran](#), [Egypt](#), and, most recently, [Kyrgyzstan](#). Potentially as important is the ability of message-senders to target carefully selected segments of a given population, whether they be [would-be jihadists](#), young [Russian nationalists](#), [climate change activists](#) . . . or just a bunch of [kids who want to hang out](#) together in a given neighborhood.

Conversely, the inexpensive new media also make it possible for individuals and small groups to broadcast to the world, thus challenging the information control that countries and organizations were once able to impose. Some such efforts [empower whistleblowers](#), causing serious [discomfort for governments](#); some allow political activists to aggregate and document violations of [election laws and human rights](#); some allow individuals to make progovernment statements [more powerful](#) than even their [government might](#); and some permit adherents of conspiracy theories to [promulgate and document their charges](#).

Paradoxically, there is also another other side of “channel specificity,” because even as message-senders have to learn how to target their messages ever more finely, they also have to learn that it no longer is possible for a message-sender to be confident that a message intended for one group will not reach other groups as well. Sometimes this can result simply in a gaffe, as when France’s First Lady [Carla Bruni](#) compared a

leading French newspaper to a Nazi newspaper, or then president [Vladimir Putin](#) of Russia spoke of Africa's "cannibal past." In other instances, however, the instant global attention that a message *can* get means that politicians are no longer able to address one message to a domestic audience and another to an international one—something that has tripped up both Afghanistan's president [Hamid Karzai](#) and U.S. President [Barack Obama](#).

The fact that unintended messages can get global attention while carefully crafted, well-placed messages can languish (as was demonstrated in an earlier paper) points to the extreme difficulty of answering the last of Lasswell's question, about *the effect* a given communication has had. Although presumably the purpose of any act of communication is precisely to have an effect, there is very little clear evidence of predictable, repeatable demonstrations of a causal relationship between a message sent and an action undertaken. The study of this question, grouped under the general rubric of "media effects," was begun primarily by scholars who had escaped from Nazi Germany, making it unsurprising that they ascribed to media the power to inject ideas directly into human brains, thus giving rise to the so-called "[hypodermic needle](#)" theory of media effects. As tempting as the theory is to people [trying to explain](#) adverse social phenomena, there is very little evidence to support it—just as there is inconclusive or disputable evidence to support nearly every other theory that has been advanced to predict the outcome of a particular message. Not surprisingly, because the entire advertising industry rests on the claim that audience behavior can be influenced, there is a vast body of literature supporting various claims of efficacy—but, as noted, very little genuine evidence.

This does not mean, though, that analysts cannot draw conclusions about the effects that a given message-shaper *intends* a given message to have. That, combined with the answers to the questions generated by the other of Lasswell's questions, makes it possible to shape hypotheses about the goals of a given message-sender, the audience to whom that is addressed, and the sophistication of the sender's understanding of the audience.

Comparisons across a given “effect space” would also allow analysts to draw conclusions about the other messages that are competing for the attention of that audience, or about other senders who are trying to achieve similar effects but perhaps with different messages or through different channels. Even more revealing is to observe how a message-sender “converses” with a given audience, changing elements of the message, or the channel, or even the desired outcome.

A CLOSING PARADOX

Lasswell’s assumption that there is a discernible link between a message sent and a subsequent action points to the central problem of information use, which is that of causality. Our human ability to make patterns, to select some elements from the onward flow of life while discarding others, and so to declare X to have “caused” Y, is one of the things that has given our species its enormous success. This does not mean, however, that the patterns we create are correct, complete, or truly causal. While it may seem easy to reject as “illogical” or “impossible” such predictions as that the [world will end](#) on December 21, 2012, there is no way of knowing until that date whether or not the prediction is correct—events may be extremely unlikely, but one of the things that recent history should have taught us is that very little is in fact impossible. Perhaps even more disturbingly, there is no way of “proving” to the satisfaction of all what caused events that have already occurred. Did the French Revolution (to take just one example) occur because of widespread poverty, heavy taxation, competition with England, the spread of Enlightenment ideas, a series of famines, failed land reforms, the example of the U.S. revolution, the dialectics of history, or [as God’s punishment](#)? Each of these “causes” will find adherents, as will various combinations of them, with different weights given to each by each explainer.

The challenge for analysts thus is not to find “true causality” but rather to understand what audiences of interest are accepting (or tending to accept) as causal. The proper “intelligence question” thus is not “what is true?” but rather “what

is the narrative framework that is being used to separate signal from noise?” The analysts who assume, for example, that rising prices and a deteriorating food situation in North Korea will “logically” lead to unrest and regime change may well find themselves to have been wrong, because a dominant narrative in that country is the—to outsiders—unimaginable one, that North Korea is the [last racially pure nation](#) on earth. An analyst who manages to work inside of that national narrative will have very different insights, and pay attention to very different information, than will an analyst who assumes that North Koreans (or any other group) receive and process information pretty much like everyone else on the planet.

The challenge may be even greater for the official communicators, who are trying not only to reach but also to influence others. American values can differ in significant ways from those of people in other nations, so that to present those values in an American narrative means that the message simply will not be noticed or understood. Conversely, however, a story entirely recast into the narrative structure of the would-be listener no longer belongs to the teller. The experience of the U.S.-backed Alhurra TV station has illustrated both of those extremes, when its initial [failure to capture audiences](#) of any significant audience size was followed by attempts to provide content of greater interest to target audiences, which brought down the wrath of U.S. policymakers, who accused the station of “[echoing Al-Jazeera](#).” The only solution—if there is one—is to find ways to recast one narrative in the terms of another. This was done successfully in the antilittering campaign that spawned the now-famous slogan “[Don’t Mess With Texas](#)” and was done, most amusingly, by anthropologist Laura Bohannon, who [rewrote Shakespeare’s Hamlet](#) to fit the sensibilities of the Tiv people among whom she was living in West Africa. It has been attempted by Kuwaiti entrepreneur Naif Mutawa, who transformed the ninety-nine attributes of Allah into [ninety-nine separate super heroes](#), and by “tele-evangelist” Amr Khaled, who is recasting the [Western “up-by-the-bootstraps”](#) story to fit an orthodox Sunni Muslim world view.

The danger, however, is that this recasting must be done

very carefully, for a clumsily done effort at this kind of translation can draw attention for entirely the wrong reason and thus have entirely the wrong effect—as was more than amply demonstrated by this video, in which officials of Singapore’s Media Development Authority—essentially the country’s censor—produced a [rap-style video](#) to demonstrate their affinity for new media.

The results, for any would-be communicator, are instructive in the extreme, as this clip may suggest (sample viewer comments at right).

Singaporean Minister Rap

earku 37 videos



isd working papers in new dipomacy

geodome83 This is how PAP loose votes. 3

mactr0nise WTF???? simi lai de SHYT LA RAP??? tis should be old ppl dancing la

chosk80 HAHAAHAHAHA Damn Lame!!!!

kikilalalittlewins old people rap -

kikilalalittlewins jie sai lah so lame

upgradeboliao what the hell. This is so stupid man...

exeter88 wah piang eh??? simi sai???

btanie After eating Cavair they pretend they are Fried Chicken Eaters.....how artificial and insincere can they get? Who are they trying to hoodwink? MDA is an unnecessary Organisation sucking up Public Funds.

reallydead this is RAP? OMG this is not RAP cant they tell the difference...embarrassing

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