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Peace Dove Psyop leaflet AF5c11L1 dropped in Afghanistan by the Coalition in 2002.

Three Practical Lessons from the Science of Influence Operations Message Design

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Introduction

“There is a funny story in regard to the Peace Dove depicted on some of our leaflets. Many of the Afghans believed the symbol to be some type of chicken and they assumed that the leaflet could be used as a coupon that entitled them to a free bird or meal provided by the Partnership of Nations.”¹

While stories like this are by no means the norm for information operations (IO) carried out by allied forces, a vast majority of which are carefully planned and professionally executed, such incidents do occasionally take place. In his article entitled “PSYOP Mistakes?”, US Army Sergeant-Major Herbert Friedman lists dozens of examples of IO activities drawn from a variety of military campaigns, ranging from the First World War to the recent Libya campaign, that failed to communicate their intended message to their target audience (TA) members. For example, there was the incident of the “ghost at the dinner table” leaflet distributed during the Korean War in 1951.



Korean War Allied Psyop leaflet.

“The text on the front is, ‘Your place will be empty.’ Text on the back is, ‘Because Communists officials continue to stall at the Armistice talks – YOURS WILL BE THE EMPTY PLACE AT YOUR FAMILY’S NEW YEAR REUNION. Because Communist leaders compel you to continue this hopeless war – IN THE HEARTS OF YOUR FAMILY THERE IS GREAT EMPTINESS.’

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This leaflet confused the Chinese... Who is the person with the bones showing through? This is not a traditional way to show a ghost in China... The Chinese did not understand the wealth depicted on the leaflet, and truly believed that the family of a soldier would be poor. The leaflet served no military purpose and failed in its attempt to demoralize the

Chinese Army. The Americans were thinking Thanksgiving dinner, and the Chinese had no clue."²

Friedman cites other examples of IO products failing due to cultural misunderstandings, including: the US practice of leaving the ace of spades cards on the bodies of the North Vietnamese to terrify the enemy. These left the Vietnamese confused because they did not share the American notion of associating the ace of spades with fear and death. Similarly, Iraqi soldiers, unfamiliar with the use of a floating bubble over the head to represent the depicted individual's thoughts, were left confused by US PSYOP leaflets relying upon 'thought bubbles' to convey their messages.

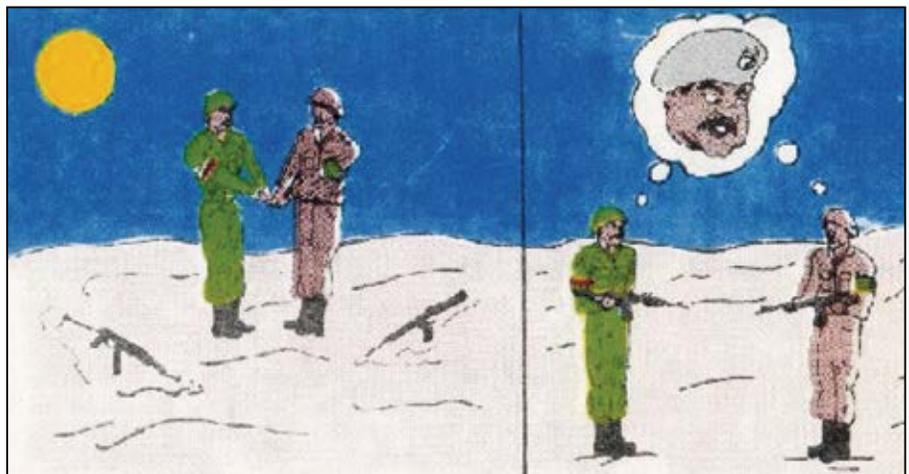
Such stories are familiar to experts in the field of cross-cultural marketing, who know that a symbol must be understood by the target audience, in the way it is intended, to ensure effective communication of a message. If the target audience members understand the message differently from the way intended by the message designers, then the message can have an unpredictable impact, as was the case with the peace-dove, ghost-at-dinner, ace-of-spades, and the 'thought-bubble' campaigns. Thus, the CAF's Joint Doctrine Manual on Psychological Operations rightly points out that, "...the target audience analysis is necessary in the planning and conduct of PSYOPS operations," that "...access to a thorough understanding of the customs, ethics, values, and goals of the target audience" is needed, and that "...the test is whether the message will get the desired response."³ In a similar vein, the US Army PSYOP TTP document provides the following guidance for development of an effective PSYOP product.

"The product should also be approached from a culture's perspective to ensure the product will have a cultural resonance with the TA. Culturally dictated modifications may be made automatically by a translator; questions should be asked that reveal such changes and then determined whether they convey the intended message."⁴

The concept of *cultural resonance* is also commonly invoked by cross-cultural marketing experts, both as an ideal for effective message design, and as a *post-hoc* explanation of the success or failure of a marketing campaign. At the time of writing, a Google search for the phrase 'cultural resonance' returns 26,200 web pages! Despite the widespread appeal of the intuitive notion of resonance, however, there does not appear to be a commonly agreed-upon scientific definition of the term. Drawing upon the analogy with physical systems, social scientists define an idea as culturally resonant if it 'strikes a responsive chord' with the target audience and 'fits' with the audience's previous beliefs, worldviews, and life experiences. Social movement researchers Snow and Benford argue that, "...the greater the correspondence between values promoted by a movement and those held by potential constituents, the greater the success of the mobilization."⁵

University of Texas communication professor Hua-Hsin Wan defines resonance as, "...the achievement of a harmonious state of mind in an individual due to accordance between an external stimulus and relevant nodes stored in the long term memory."⁶ She argues that this can be measured by seeing how well a message matches the expectations and values of a target audience member. The notion of 'a fit' and 'a match' between a target audience member's beliefs and the message-content not only seems to capture part of the intuitive notion of resonance, but it also appears to have some theoretical merits. According to widely-accepted psychological models of information comprehension, in order for an individual to understand a message, one must be able to retrieve a similar *schema* from their memory.⁷ A schema is a mental representation of a packet of information about a concept or a commonly used procedure, such as visiting a restaurant or doing laundry.

Scientists have found some support for the notion that ideas that activate culturally familiar schemas are better remembered than ideas that are culturally unfamiliar. The eminent psychologist Sir Fredrick Barrett conducted a series of experiments in the 1930s in which he found that culturally unfamiliar concepts such as 'a canoe' were more easily forgotten and distorted by people, when compared with culturally familiar concepts.⁸ In a widely-cited study, psychologists Bransford and Johnson found that participants who had seen the title "washing clothes" better understood and recalled the following text, as compared to participants who had not seen the title.



Allied Psyop leaflet used during Operation *Iraqi Freedom*.

The procedure is actually quite simple. First you arrange things into different groups. Of course, one pile may be sufficient, depending on how much there is to do.

If you have to go somewhere else due to lack of facilities, that is the next step. Otherwise you are pretty well set.

It is important not to overdo things – that is, it is better to do too few things at once than too many. In the short run, this might not seem important, but complications can easily arise. A mistake can be expensive as well.

After the procedure is completed, one arranges the materials into different groups again. Then they can be put into their appropriate places.

Eventually they'll be used once more and the whole cycle will have to be repeated. However, that is a part of life. So how do you do yours?⁹

Branford and Johnson hypothesized that the differences in comprehension and recall were due to inability of the participants who had not been given the title to retrieve the appropriate schema from their memory. Thus, for a new message to be understood, it must activate similar concepts in the learner's mind. To look at an extreme case, consider watching an ad in a language that you do not understand. The ad may not even be understood by you much less appeal to you to be considered as resonating with you. Thus the reason that the family-dinner leaflet and the ace-of-spades card campaign failed is that the target audience members did not possess the appropriate schemas that the message designers had in their minds when they designed the ads. In the peace-dove episode, the target audience members not only failed to recall the appropriate schema but actually recalled a different one, namely that of a "free chicken coupon." While grocery stores coupons are not a widespread phenomena in most of Afghanistan so it's unlikely that they could have been the source of the "free chicken coupon" schema and thus it is doubtful that a Coalition leaflet would have been confused with a grocery store coupon. Such a schema is more likely to have been acquired from the prior Coalition leaflets depicting promotional items such as radios, soccer balls, and T-shirts which were indeed given away by the Coalition soldiers even though their distribution would not have required the presentation of leaflets showing depicting their picture (although presentation of such leaflets probably would have helped convey the request more clearly). This suggests that after the initial research to learn about the target audience member's shared beliefs, one cannot rest on one's laurels and must keep up-to-date with changes in TA's mental knowledge, some of which may be caused by our own IO campaigns! This also illustrates the pitfalls of relying solely on the advice of expatriates or cultural anthropologists or other subject matter experts who may not have been to the area of interest recently.

Lesson 1: Rise Above Your Own Cultural Schemas and Learn Your TA's Cultural Schemas to Design an Understandable Message

Traditionally, it is thought that the hard part of designing PSYOP messages for target audiences in an expeditionary environment is learning a foreign language and immersing oneself in a foreign culture. While learning about the schemas of

the target audience groups is not easy, being able to overcome one's own cultural schemas is equally difficult. Indeed, the very mark of a culturally successful idea is that it seems so obvious, so intuitive, and so natural to its adherents that they cannot imagine a world where it may not be so. Marketing researchers Chip and Dan Heath call this the "curse of knowledge" and suggest that it particularly afflicts teachers who find it so hard to imagine what it was like before they became subject matter experts!¹⁰

Successful message designers must realize the limitations of their knowledge by being able to recognize mental schemas that are specific to their own culture, and to resist the temptation to assume that it must be universal because it just seems so obvious. They should 'pilot test' their messages on any available locals to see if they react in expected ways, prior to mass production and distribution. USAF Major Norman D. Vaughn's Korean War story illustrates this point well. Major Vaughn and his team wanted to design a campaign to convince North Korean soldiers to surrender by showing them that they would be treated humanely by UN soldiers. They designed a leaflet depicting, "...a handsome, smiling soldier, wearing a distinctive UN uniform. He was on one knee and had picked up a little girl's doll. He was putting the arm back on the doll while a little girl standing next to him is crying." Even though the leaflet seems to employ universal messages that do not appear to be Western culture specific, Major Vaughn had the good sense to show the leaflet to a group of North Korean prisoners. Their reaction surprised him:

"The first one snorted, letting us know it was awful. Another pretended to spit on the floor, which was his way of showing disapproval. The other two nodded in agreement. The officers had the same response. Through an interpreter, we asked, "Why is this so terrible?" Their answer was, "To hell with little girls. We only care for boys. And our girls don't have baby dolls anyway." The next day we presented revised artwork. The child was now a crying boy. The doll had become a cart, and the soldier was fixing a wheel that had come off. All the test prisoners smiled their approval. It was a good leaflet."¹¹

Perhaps recognizing how difficult it is to learn a TA's cultural schemas and to rise above one's cultural schemas to design a message that is understandable for the TA, most PSYOP message design guidelines stop there. Unfortunately, recent research in the science of message design shows that designing a truly culturally resonant message requires some additional work.

Lesson 2: Get the TA's Attention

Have you seen the TV ad where the fries talk to the ketchup and call it their best friend? How about the insurance ad featuring the curiously British-accented gecko? Have you ever wondered as to why so many ads feature talking objects, animals, and other counter-intuitive entities? In 2007, I collected a random sample of 100 TV ads from the ad database *adcritic.com*, and then had two research assistants analyze them for the presence of counter-intuitive objects and events. They found that one out of every four TV ads featured either a counter-intuitive object or a counter-intuitive event.¹² The French American anthropologist Pascal Boyer studied the cultural and religious beliefs of people around the world and found that a



Hizbollah leader Sheikh Hassan Nasrallah.

large number contained a number of ideas that would seem counter-intuitive to an outside observer.¹³ Boyer further argued that most of these counter-intuitive ideas were only minimally so. He called them *minimally counter-intuitive* (or MCI for short) i.e., ideas such as “a rock that eats,” because they violate a small number of intuitive expectations of the category. This is unlike the *maximally counter-intuitive concepts*, such as “a rock that eats and exists on Tuesdays and thinks,” that violate a larger number of intuitive expectations associated with members of that category. Boyer hypothesized that MCI concepts have transmission advantages over other types of ideas because MCI ideas are remembered better than other types of ideas. A number of subsequent studies have largely confirmed Boyer’s findings.¹⁴

While traditionally, PSYOP messages do not appear to have exploited MCI objects and events to the same extent as consumer ads have done, but they have been used to gain a TA’s attention in some successful campaigns. For instance, during the Israel-Lebanon war of July 2006, the Israeli Defense Forces developed a number of leaflets depicting Hezbollah leader Sheikh Hassan Nasrallah with his characteristic beard and turban on an animal body.¹⁵

Western leaders (including the US President, the British Prime Minister, as well as various British Ministers) have repeatedly denied the suggestion, pointing out numerous scenarios where the West actually helped Muslims, including during the Yugoslavian wars in the 1990s and in Indonesia following the 2010 tsunami. Clearly, Muslims have come to expect such assertions from the usual suspects, and have learned to ignore them. In 2008, the FCO decided to fund an ad campaign featuring prominent British Muslims, such as the Lord Mayor of Birmingham, talking about their success in simultaneously maintaining a positive Muslim and a positive British identity. Speaking in fluent Urdu, and sporting a beard, a *Jinnah cap* (the prayer cap favoured by the Pakistani imams), and a traditional *sherwani* coat, the Lord Mayor said:

“I am proud to be the Mayor of a multicultural city as Birmingham where 140,000 Muslims reside. My responsibility as a Mayor is to figure out how to reach out to a multicultural people to convey them the message of love and peace. In this respect, my religion helps me follow the path of self recognition. I am Chaudhary Abdul Rashid. I am Muslim. I am a British citizen.”



Israeli Psyop leaflet used during Israeli-Lebanon War of 2006.

The culturally counter-intuitive message of “I am the West” campaign struck a chord in Pakistan, where the ad was aired on a number of national radio and TV channels.

Lesson 3: Get TA to Self-discover Your Message as Insight

Simply catching the attention of the target audience is not enough. To illustrate this point, consider two versions of Camlin’s “permanent markers” ad that were both posted to YouTube in March 2008 approximately a year after the ad’s initial appearance on Indian television. One version was 16 seconds longer than the other. The ad had won awards in India, had been wildly successful in India, but as cross-cultural marketing experts know, success in one market is no guarantee of success in another market (in this case, the Indian and non-Indian YouTube audience members from around the world). A check in February 2012 revealed that while the longer version received over 700,000 hits, the shorter version only attracted a meager 12,000 views. The shorter version starts with a bird’s eye view of an Indian village, and quickly zooms in on a thatch-hut where a barely breathing man lies on a bed with a candle on his bedside, which goes out just as the man’s breathing appears to stop. The camera zooms in on his sad wife, who is immediately surrounded by the professional mourning women, who quickly take off her bangles and try to erase the red mark on her forehead. As the women are unable to erase the *bindi* mark despite their best efforts, the man restarts breathing with a cough, and the smile returns to his wife’s face. The scene changes to the outdoors as the sun shines and the man, apparently fully recovered, uses a Camlin marker to make a *bindi* mark on the forehead of his smiling wife. The ad ends with the announcement “Camlin permanent markers. Really permanent.”

The ad is clearly culturally counter-intuitive for a non-Indian audience that may not know about the significance of the red bindi mark on the forehead, the role of professional mourners, or traditional expectations regarding the role of a widow in India. Thus, it is surprising that the shorter version of the ad did not attract even more attention from the international audience for whom it is even more culturally counter-intuitive than it is for the Indian audience. Why did an ad that so clearly resonated with an Indian audience, not resonate with an international audience? The answer lies in examining the extra 16-second preamble that is appended at the start of the longer version of the ad, which seems to have been much more popular with the international

YouTube audience members. The preamble consists of the following text message.

“In India, Bangles, locket and a vermilion mark on the forehead are symbols of a married woman.

Daily the husband applies the vermilion on the wife’s forehead as it is believed to be connected to his lifeline.

When the husband dies, Rudali’s (Professional Mourners) come and strip the woman of these symbols.”

What do these 51 words provide to a non-Indian audience member that causes the longer version of the ad to resonate with them?



Indian woman with red bindi mark on her forehead.

The answer lies in better understanding why people pay more attention to messages that violate their expectations. Cognitive psychologists argue that this is so because expectation violations indicate learning opportunities.¹⁷ They indicate the need to improve one's world model. But in order for one to actually learn something from a learning opportunity, one must be able to make some sense of the surprising situation. Without the preamble, non-Indian audience members are not able to make sense of the Camlin ad, whereas with it, they are. Having been equipped with the knowledge of the significance of the vermilion-mark on the forehead, the role of professional Rudali mourners, and traditional cultural norms regarding the role of an Indian widow, the audience members are able to make sense of the ad and derive the key insight needed to connect the events in the ad, namely, that the inability of the Rudalis to erase the bindi mark from the woman's forehead brought her husband back to life. The initial expectation violation of the husband coming back to life after his apparent death make the puzzled audience members search their long term memory for a solution to this conundrum. The viewers of the longer ad (as well as Indian viewers of the shorter ad) possess the knowledge that allows them to resolve the apparent inconsistency. In order to make sense of the puzzle, the target audience members have to create the mental elaboration that the Rudalis were unable to erase the bindi mark because it was created using the "really permanent" Camlin markers. The ability to solve this mental puzzle makes them feel good about themselves. It is this positive effect, along with the fact that they feel that they have created the knowledge that the clever marketer wanted them to create (in this that Camlin markers are "really permanent"), that makes the ad resonate with them. Contrary to the view of cultural resonance as an expectation-fit or

match, I have argued that a message only resonates with members of a cultural group if it violates their expectations, but then allows them to justify these violations by creating new insight and by experiencing the delight of having discovered something they did not know before.¹⁸ In order to avoid rousing people's reactions and counter-arguments, it is critical that the ad designers allow the TA members to self-derive the key message. People are more likely to be affected by a message if they feel that they have derived it themselves, rather than being 'spoon-fed' a message by marketers.

Conclusion

Designing effective messages that resonate with a target audience is not an easy task, especially for soldiers working in expeditionary environments. This article distills the results of recent psychological research on effective message design into three practical steps that can be followed by practitioners in the field in order to design effective messages. The first step involves rising above one's own cultural schemas, and learning as much as possible about a target audience's shared cultural schemas in order to design messages that are understood by the target audience members as intended. The second step involves carefully placing surprising elements into the message to catch the target audience member's attention. The third and final step further specifies how to use this attention to get the target audience members to infer the desired message as their own insight. Messages that follow all three steps resonate with a target audience, and they achieve their objective.



NOTES

1. H.A. Friedman, *PSYOP Mistakes?* 2012, at <http://www.psywarrior.com/PSYOPMistakes.html>. Accessed 27 February 2012.
2. *Ibid.*
3. J7-DLLS-2, *Joint Doctrine Manual on Psychological Operations*, D.O.N. Defence, Editor. 2004, Chief of the Defence Staff: Ottawa, Canada.
4. FM-3-05.301, *Psychological Operations Process Tactics, Techniques, and Procedures*, D.O.T. Army, Editor. 2007, Headquarters: Arlington, VA.
5. D. Snow and R.D. Benford, "Ideology, Frame Resonance, and Participant Mobilization," in *International Social Movement Research*, H. Kriesi and S. Tarrow (Eds.) (Greenwich, CT: JAI, 1988), p. 213.
6. H. Wan, "Resonance as a mediating factor accounting for the message effect in tailored communication-examining crisis communication in a tourism context," in *Journal of Communication*, 2008. **58**: pp. 472-489. (p. 475).
7. W. Kintsch, *Comprehension*. (Cambridge, MA: Cambridge University Press, 1998).
8. F.C. Bartlett, *Remembering*. (Oxford, UK: Cambridge University Press, 1932).
9. J.D. Bransford and M.K. Johnson, "Contextual prerequisites for understanding: Some investigations of comprehension and recall," in *Journal of Verbal Learning and Verbal Behavior*, 1972. **11**: pp. 717-726.
10. C. Heath and D. Heath, *Made to Stick*. (New York: Random House, 2007).
11. H.A. Friedman.
12. M.A. Upal, "What is More Memorable, Counterintuitive Concepts Interpreted Metaphorically or Literally?" in *Proceedings of the 29th Annual Meeting of the Cognitive Science Society*. (Nashville, TN: Lawrence Erlbaum Press, 2007).
13. P. Boyer, *Religion Explained: The Evolutionary Origins of Religious Thought*. (New York: Basic Books, 2001).
14. The growing list of studies includes the following:
 - J. Barrett and M. Nyhof, "Spreading non-natural concepts: The role of intuitive conceptual structures in memory and transmission of cultural materials," in *Cognition and Culture*, 2001. **1**: pp. 69-100.
 - P. Boyer and C. Ramble, "Cognitive templates for religious concepts," in *Cognitive Science*, 2001. **25**: pp. 535-564.
 - M.A. Upal, "Role of Context in Memorability of Intuitive and Counterintuitive Concepts," in *Proceedings of the 27th Annual Meeting of the Cognitive Science Society*. (Stressa, Italy: Lawrence Erlbaum Press, 2005).
 - M.A. Upal, et al., "Contextualizing counter-intuitiveness: How context affects comprehension and memorability of counter-intuitive concepts," in *Cognitive Science*, 2007. **31**(3): pp. 415-439.
15. H.A. Friedman.
16. This view has been elaborated in the following articles:
 - M.A. Upal, *An Alternative Account of the Minimal Counterintuitiveness Effect*. 2009.
 - M.A. Upal, "From Individual to Social Counterintuitiveness: How layers of innovation weave together to form multilayered tapestries of human cultures," in *Mind and Society*, 2011. **10**.
 - M.A. Upal, "Ratcheting-up of Counterintuitiveness in Rumors and NRM Doctrine," in *Proceedings of the Annual Meeting of the Cognitive Science Society*. 2011.
17. R.C Schank, *Dynamic Memory Revisited*. (New York: Cambridge University Press, 1999).
18. M.A. Upal, et al., "Contextualizing counter-intuitiveness..."