REF2021

Institution: University of Birmingham

Unit of Assessment: UoA 17, Business and Management Studies

Title of case study: Using figurative language and images to improve sexual health and social marketing campaigns in the West Midlands and beyond

Period when the underpinning research was undertaken: 2016-2018

Details of staff conducting the underpinning research from the submitting unit:

Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
David Houghton	Senior Lecturer in Marketing	2011-present
Sheena Leek	Senior Lecturer in Marketing	2004-present

Period when the claimed impact occurred: 2016-2020

Is this case study continued from a case study submitted in 2014? No

1. Summary of the impact
We each see approximately 700 adverts every day; fewer than half of these are noticed, with less than 1% making a demonstrable impact on the actions or habits of target audiences. This low 'hit rate' is a particular challenge for charitable organisations and small businesses who typically have smaller marketing budgets and thus a more pressing need for advert effectiveness. In response to this challenge, and in collaboration with marketing and creative agency Big Cat, the Exploring Multimodal Metaphor in Advertising (EMMA) team, including Houghton and Leek, have:

1. **Improved the reach and performance of a regional public health campaign**, leading to an **increased take-up** of sexual health services and a 28% increase in the number of sexual health tests;
2. **Increased the effectiveness of the marketing campaigns** of community and well-being organisations across the West Midlands, in line with the University of Birmingham Business School's focus on responsible business and civic mission;

Changed organisational practices across the advertising industry, particularly in the West Midlands region.

2. Underpinning research

European Commission-funded research undertaken at the University of Birmingham by Dr David Houghton and Dr Sheena Leek from the Department of Marketing identified new ways of ensuring that marketing campaigns are received by their target audiences, provide value and successfully convey their intended messages through the use of metaphor and metonymy in advertising.

The research funded by the EMMA grant (ref: EMMA-658079), part of an interdisciplinary collaboration with linguists at the University of Birmingham, explored the combination of metaphor and metonymy in advertising and measured their impact on the interpretation, speed of comprehension and general effectiveness of advertisements. This was a broad-scale empirical study of multi-modal figurative language in advertising. It was innovative because it identified different variables influencing the success of advertising and also examined the interplay between these, tested them empirically and explored their emotional impact. To do this and implement their findings, EMMA — and subsequent collaborative workplace-based projects — used qualitative interviews and biometric technologies (such as electrodermal activity measurement and eye tracking) to examine the extent to which people engage with figurative language and linguistic concepts in marketing campaigns. These methods allowed the EMMA team to articulate potential benefit of figurative language for social marketing campaigns, advertising agencies, professionals and businesses.

Key research findings:

RF1. In comparison with other figurative tropes and literal language, the presence of correlational metaphor, situational irony and visual hyperbole in advertisements increases their appeal (R1, R2).

RF2. Contrary to expectation multi-layered metaphors — which require viewers to interpret several ideas or relationships within the same message — are particularly effective for conveying complex messages and are understood more quickly than single-layered metaphors (R1, R2).

RF3. Responses vary according to nationality. This is particularly significant in super-diverse contexts such as Birmingham and the West Midlands. If advertisers are sensitive to linguistic and cultural differences in people's responses to figurative messaging in metaphors, local and international communities are more likely to benefit from specific, appropriate and effective advertising (R1).

RF4. Metaphors that contain an 'optimal' degree of novelty are more likely to be perceived to be of higher quality and understood more quickly than those that are highly novel. Metaphors are more likely to be considered high-quality when they assert something about the sentence subject negatively (e.g., where "A is B", with A presented as more negative than B), and do so infrequently (in comparison with the sentence subject itself) (R2).

RF5. The function and purpose of social-media marketing messages (e.g., tweets intended to share product information or improve public relations) are related to differences in levels of audience engagement with these messages (e.g., likes, shares and comments). Digital marketers should consider their message intention (e.g., to inform or provide solutions) in light of the potential reaction of intended audiences in order to position their social media offering more strongly and fulfil audience needs (R3).

Message characteristics and the words used in messages are related to varying degrees of engagement and behavioural reaction on social media platforms. If digital marketers consider the linguistic content of their messages (e.g., using more informal language when sharing event information), they can strengthen their brand's social media position, increasing likes, comments and shares (R4).

3. References to the research

R1. Pérez Sobrino, Paula, Littlemore, Jeannette, & Houghton, David. (2018) The role of figurative complexity in the comprehension and appreciation of advertisements. *Applied Linguistics*, 40(6): 957– 991. DOI: 10.1093/applin/amy039

R2. Littlemore, Jeannette, Pérez-Sobrino, Paula, Houghton, David, Jingfan, Shi, & Winter, Bodo. (2018) What makes a good metaphor? A cross-cultural study of computer-generated metaphor appreciation. *Metaphor and Symbol*, 33(2): 101– 122. DOI: 10.1080/10926488.2018.1434944

R3. Leek, Sheena, Canning, Louise, & Houghton, David. (2016) Revisiting the Task Media Fit Model in the era of Web 2.0: Twitter use and interaction in the healthcare sector. *Industrial Marketing Management*, 54: 25– 32. DOI: 10.1016/j.indmarman.2015.12.007

R4. Leek, Sheena, Houghton, David, & Canning, Louise. (2018) Twitter and Behavioural Engagement in the Healthcare Sector: An examination of product and service companies. *Industrial Marketing Management*, 81: 115– 129. DOI: 10.1016/j.indmarman.2017.10.009

4. Details of the impact

   1) <u>**Improved the reach and performance of a regional public health campaign, leading to an increased take-up of sexual health services**</u>

The EMMA research resulted in a 28% increase in the number of sexual health tests in the context of worsening sexual health at a regional level (35,635 new STI diagnoses in the West Midlands in 2017; Public Health England) and sexual health service cuts nationwide (resulting in 50% of UK women having "poor sexual health"; *The Guardian*, 9 January 2020), EMMA **increased public awareness of the importance of sexual health** across the Birmingham NHS Foundation Trust, one of the largest Trusts in England; this increased awareness led to a

greater uptake in STI screening and services and, ultimately, **increased diagnoses and treatment**.

Umbrella Sexual Health is part of the Birmingham NHS Foundation Trust and provides sexual health services across Birmingham and Solihull. EMMA's research changed Big Cat's approach, and directly shaped the tone of Umbrella's July 2019 campaign in a range of online platforms and physical locations. EMMA's findings suggested that figurative puns involving more cognitive dissonance (RF1, RF2), more movement (RF5) and more optimally

Figure 1: a rotating advert in Birmingham city centre at the busy Holloway Circus junction.

creative metaphor (RF4, RF6) were more likely to lead to take-up of their important messages. Big Cat incorporated these findings into the campaign and their influence is clear in the resulting adverts.

The Director of Communications at University Hospitals Birmingham NHS Foundation Trust testifies to the importance of EMMA in shaping the campaign: "The research undertaken by the [EMMA] team and their input regarding the structure of campaign headlines and the effective use of metaphor, was instrumental in enabling the campaign to **raise awareness** of Umbrella Health, **increase requests** for free STI self-sampling kits, and to **increase traffic** on the

Umbrella website" (S1). Data from the final campaign that ran in July 2019, demonstrates significantly improved take-up on previous campaigns via a number of success metrics:

Figure 2: an example tweet from the campaign

- Increase in Facebook posts from ▮▮▮ in 2018 to ▮▮▮ in 2019 (S2)
- Increase in advert impressions from ▮▮▮ in 2018 to ▮▮▮ in 2019 (S2)
- Increase in visits by ~1000 to the 'Appointments' page (which is the first step to ordering a kit or health check) (S2)
- Increase in number of STI kits ordered from Umbrella Sexual Health (39% increase from ▮▮▮ in 2018) which represents the highest number of kits ordered in 2019 for one month (in July) (S3)
- Increase in kits returned for testing (27.7% increase from ▮▮▮ in 2018 to ▮▮▮ in 2019) (S3)
- Umbrella have never had such a high distribution number of STI testing kits in the 5 years of records (S3).

In addition to increased take-up, EMMA's findings and recommendations resulted in **economic gains** for Umbrella; the substantial increases in STI kits ordered, returned and tested were achieved with a ▮▮▮ decrease in budget, from ▮▮▮ in previous campaigns to ▮▮▮ in the 2019 STI campaign (S2). It also marked a **change in practice** going forward, as the Director of Communications goes on to testify: "This research-led approach has therefore had a **significant and quantifiable impact on the success of the campaign**. The incorporation of linguistic research was a **new a way of working** for Umbrella and we will continue to pay close attention to our use of figurative language" (S1).

2) <u>**Increased the effectiveness of the marketing campaigns of community and well-being organisations in the West Midlands**</u>

EMMA's findings led to **significant improvements in marketing campaigns** for Big Cat's other major social clients in the region, for example, Solihull Community Housing (SCH) and RightTrack.

SCH is a not-for-profit organisation that manages the housing stock on behalf of Solihull Council and delivers housing services to the tenants of Solihull, West Midlands, which encompasses approximately 10,000 tenanted homes. EMMA's work led to **major improvements in the SCH logo** — the company's 'key branding tool' — which has been implemented across the website and communications, staff work-wear, fleet of vans (70+) and company offices. SCH reports that these improvements have led to an **increased number of website page views (22%), website visitors (52%) and new website users (54%), as well as a ▮▮▮ growth in customer activity**

(S4). The effectiveness of this collaboration has thus "served to strengthen relationships between SCH and the Solihull community" (S5).

The EMMA team achieved this by recommending that SCH branding should include complex figurative images containing multiple metonymic references to the services (RF1, RF2, RF6) provided in appropriate, bodily or environmentally based colour combinations (RF7); this was an approach "which had not been considered with previous SCH branding", but which allowed SCH to "more effectively convey our organisation's values" and thus better "engage and communicate with our customers." (S4) SCH went on to state that "[c]ollaborating with the EMMA team and Big Cat, has enabled us to explore and hone our new identity, make it more appealing, and facilitate discussions about our core values as an organisation" (S4).

Figure 3: two vans with the new branding following EMMA's recommendation

RightTrack Learning is a Birmingham-based company that provides training for organisations in areas such as equality and diversity, unconscious bias and employee wellbeing. Following EMMA's recommendations, RightTrack changed its online identity which led to **an increase in website views (9.86%) compared with the previous year** (S6).

EMMA research suggested that RightTrack should employ pairings of text and image that involve multiple, innovative metaphorical connections that nonetheless draw on existing underlying relationships, as such messages are more likely to evoke positive reactions and increase the effectiveness of the website (RF2, RF4, RF6). The Lead Director of RightTrack attested that "The EMMA research **improved the website** as the findings gave us a better understanding of how figurative messaging can be utilised

Figure 4: a screenshot of the new website following EMMA's recommendation

to deepen user engagement, and extend user time spent on the website"; he also explained how this "was an approach we hadn't applied to our website previously" and thus allowed RightTrack to create something "more sophisticated and tailored to our strategic aims" (S7).
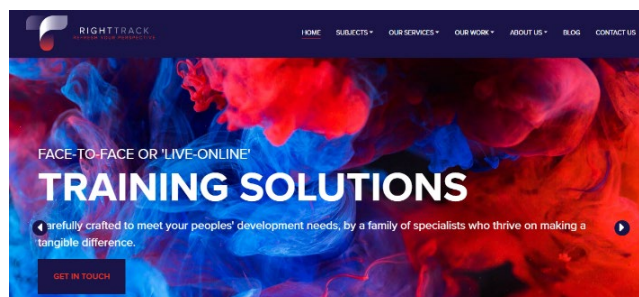
Given RightTrack's market position, this increased website engagement means that more organisations in the region are likely to seek RightTrack's services around equality, diversity and workplace wellbeing. As Big Cat noted "for the business community in Birmingham this means that more companies are receiving the help they need" (S6).

3) **Changed organisational practices across the advertising industry, particularly in the West Midlands region**

Using its 'Metaphor by Design' approach to apply the project's research findings (RF1–6) to marketing campaigns, EMMA brought about changes to advertising and branding practices more widely.

Big Cat is a leading agency in the region, with a focus on fundraising, behavioural change, healthcare and education. EMMA's collaboration on a number of projects — including the 3 outlined above — resulted in Big Cat **changing their approach** to clients by incorporating a more integrated focus on figurative messaging. The CEO states that EMMA's "research and work on these projects has in turn benefited Big Cat itself, with an improved strategic approach to figurative language and its applications within branding identities and marketing campaigns […] Our collaborative work has also led Big Cat to taking on a new member of the team, as a Cognitive Linguistic Researcher. This indicates a new dedication to embedding the EMMA team's research into our organisational approach." They now assert that their client relationships are "stronger than ever as a result of this value-added offering" (S6). The success of this collaboration and the changes in practice resulted in EMMA and Big Cat winning the West Midlands 'Partnership of the Year' in the Birmingham Post's Business Awards 2018 (S5), which afforded them "a level of recognition on a regional level we had not had before" (S6).

EMMA also brought about a **change in practice** at the West Midlands branch of the global marketing and communications agency McCann. By collaborating with the EMMA team and drawing on their research, McCann changed the way it conducts brand development, allowing for the optimal incorporation of figurative messaging at every stage from concept development through to testing; this in turn resulted directly in the organisation securing new client work (S8). The Head of Research and Development at McCann Central explained how they "are now systematically employing [EMMA's] approach, which involves using corpus-based analyses to identify figurative ways of thinking that are characteristic to different subgroups of a brand's customer base." He explained how the company has adopted this approach to secure a range of new client work, including the next round of research with Holland & Barrett (worth ▇▇▇▇▇ in Q1 next year); he was clear that McCann "would not have had the level of impact on them had we not been working with you and your team." Overall, he concluded that "This increased awareness of the importance of figurative language has **shaped the global McCann approach** to understanding the meaningful role that a brand can play in people's lives." (S8)

Finally, EMMA **raised awareness across the advertising sector** of the ways in which figurative messaging can be used effectively in everyday practice. This was achieved through the co-creation (between EMMA and Big Cat) of Insight papers about collaborative projects designed to maximise the effective use of figurative messaging. These were published in the *CreativeBrief*, an industry-wide marketing platform, which provides brands and agencies with ideas and resources for creating more effective work; the Insight papers are designed to showcase best practice and to raise awareness of innovative new approaches to addressing challenges faced across the industry (S9).

5. Sources to corroborate the impact
S1. Testimonial from Director of Communications, University Hospital Birmingham NHS Foundation Trust (24th June 2020)
S2. Umbrella Sexual Health report (July 2019)
S3. STI Kit distribution information, provided by the NHS/Umbrella Sexual Health, compares stats from Umbrella Sexual Health Campaign (July 2019), on which EMMA collaborated with Big Cat, with the month the year before (July 2018)
S4. Testimonial from Communications Manager, Solihull Community Housing (30.07.20);
S5. Successful application by Big Cat and EMMA to the 2018 BP Birmingham Business Award for 'Partnership of the Year' (awarded 10th November 2018)
S6. Testimonial from CEO of Big Cat (16h November 2020)
S7. Testimonial from Lead Director, RightTrack Learning (30th July 2020)
S8. Testimonial from Head of Research, McCann (30th May 2020)
S9. Insight papers published by Big Cat in the *CreativeBrief* (November 2020)