

Unvisibility: A Changing Paradigm in Visibility Modification

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Abstract

The shift from technology-based means of achieving invisibility to the more cost-effective method of social invisibility is given credence in this study, wherein the invisible nature of triplets, in varying accoutrements, is assessed using a standard WW-exclusion test and the Gruener Recognition Scale. The resulting data indicates that invisibility can be attained and has significant potential for military application.

Introduction

The theoretical concept of changing the visible to the invisible has long enjoyed a niche in science fiction, parlor magic and raunchy super hero jokes.¹ Decades of unsuccessful research, however, have revealed that true invisibility is nearly impossible to achieve (Marko, 2002). As a consequence, some military experts are now questioning the likelihood of realizing “cloaking devices” for future wars that could possibly take place among the stars through technical means. In this vanguard study, the concept of making the visible invisible through bending light or modified refractive indices is abandoned for a more feasible method of invisibility, one that employs the social rather than environmental atmosphere to hide physical objects from view.

The concept of invisibility stems from camouflage studies carried out in the 1980s, as popular television programs influenced the fashion industry to increase the circulation of “urban chic camouflage.” The outcome of these studies indicated that the use of standard black and green camouflage in urban settings in fact gained wearers further attention. This observation stimulated an extensive search for camouflage clothing that would be effective in many different settings and situations, allowing for military mobility through multiple locales. Research thus spurned textiles that could change pattern and colour with temperature change (Bronstead, 1989), but these clothes had minimal military application, as they required people to touch the garments in order to change their appearance. Thoughts of finding the ultimate camouflage were subsequently put aside until the recent speculations surrounding “invisibility.”

¹ Superman claims that he has never seen Wonder Woman in any suggestive positions.

Unvisibility is understood as the ability to reduce the importance of the visible to the point where recognition attains a “zero value,” given that recognition can be measured in both positive and negative values, using the recognition scale developed by Gruener (2000). In this study, identical triplets of equal height, girth and posture adopt different attire in an attempt to attain a state of invisibility while participating in a parade celebrating the founding of a local hogger. The visibility of the invisible triplets is assessed using remote distance identification processes in a standard diagnostic WW-exclusion test (Turkish, 1988) and the Gruener Recognition Scale.

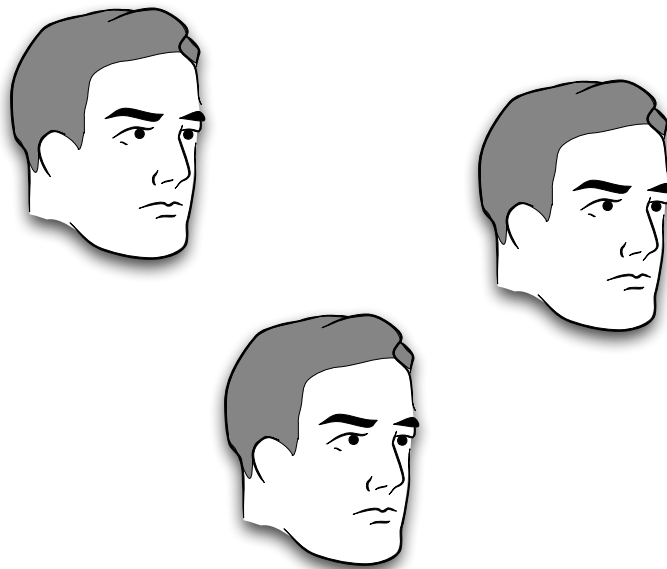
Method

A set of slender twenty-three-year-old male triplets (*figure 1*), were selected through a model search for “exotic talent” based on parity of physical

features, including height, posture and mannerism. The triplets were designated as W_1 , W_2 and W_3 . The triplets were placed in the parade at five-minute intervals and were instructed to act in identical ways, with the only difference separating them being the clothing they donned. W_1 wore a simple jungle camouflage outfit, which was tailored to accentuate his height and rugged good looks. W_2 was outfitted in a pair of blue jeans, a red and white striped shirt and a pair of glasses. W_3 wore a conservative suit of neutral grey, adorned a white belt with “ $W_3 = W$ awesome” stitched across the backside and carried a “Clash of the Titans” lunchbox.

Each triplet was provided with a specially-designed light sensitive hat, capable of recording short bursts of radiation. W_1 wore a rakish beret, W_2 wore a red and white toque and W_3

Figure 1. Profiles of Slender Twenty-Three-Year-Old Male Triplets



wore a baseball cap advertising a major beer company.

A group of twelve “military distance negotiators” (MDNs) were selected for their precision in vision and marksmanship. The MDNs were instructed by their superior to mark any suspected terrorists at a local parade using a new radiation tagging system, which involved shooting a “light tag” at the head of any suspects. Terrorists were defined for the purposes of this experiment as “any tall men in their early twenties.” The MDNs were then deployed on short notice to various locations along the parade route. The triplet targets were instructed to walk among those in the parade, traveling alongside various senior citizens recognized for their long service in the pork industry.

Following the parade, the MDNs were gathered together and shown pictures of the triplet targets. The MDNs were then asked to comment on the triplets’ attire and what influenced them in identifying the targets. Based on the frequency of “laser tagging” and the MDNs’ commentary, an individual unvisibility rating for each triplet was determined using the Gruener scale.

Results

The triplets were each tagged at least once according to the raw data collected from their head sensors. The largest number of tags was delivered to W_1 , who was noted by the MDNs as being “somewhat attractive” and a “sharp dresser.” Other comments about W_1 carried a tone of resentment and hostility towards the visually appealing triplet; in fact, one sniper shot him twice because “anyone that ‘cool’ can’t be up to no good.” W_1 was determined to have a Gruener Unvisibility Rating (GUR) of +8.5, as his attractive qualities drew excessive attention to him in a public situation.

W_2 , on the other hand, was tagged a scant one time, which upon reflection of the MDN who pulled the trigger was actually a misfire: “I was actually checking my safety and the gun went off.” One MDN commented “I saw the target, but simply ignored him when he looked in my direction because of his ridiculous outfit.” Other MDNs made similar comments about W_2 noting that “it isn’t polite to stare.” Due to the obvious desire to be oblivious of W_2 , a GUR of -0.1 was determined to be appropriate in this situation.

Table 1. Head Sensor Tagging Raw Data

Target	Number of Times Shot	Frequency of Tagging	Gruener Unvisibility Rating
W_1	9	0.75	+8.5
W_2	1	0.08	-0.1
W_3	6	0.50	-5.0

W_3 was tagged by exactly half the MDNs, drawing more attention than W_2 , but less attention than W_1 . The MDNs commented that W_3 “generally looked bad” and that he was “like road-kill—you have to look.” W_3 was determined to be so socially unacceptable that acknowledgement was requisite to ensure avoidance. W_3 was determined to have a rating of -5.0 , due to the socially unacceptable nature of his outfit.

Discussion

The clear outcome of this research is that invisibility may be possible within the near future. Although activating obliviousness has been a theory that has been bandied about for the last few years in optical and psychological circles, it is apparent that the social reality of invisibility, as a function of mentally deleting visual stimuli, has been underestimated and needs to be studied further.

The power of not being seen can be harnessed by encouraging the viewer not to care about the view, as indicated by the relative dismissal of W_2 in this study. The question becomes what combinations of colours, shapes and styles will delete various objects and structures from the visual field of care. Is it possible, for example, to make an entire building invisible? Is the property of invisibility socially determined? If so, could the military study their potential enemies for a style schema that would allow our military personnel to view our vehicles and troops on the pitch of battle without allowing our enemies the same advantage? Considering the edge visibility of the invisible would

provide for a military power moving into a conflict, military personnel could move unchallenged through aggressive military strongholds, while tanks and other heavy artillery could be deposited in the most strategic locations, all with minimal loss of life and equipment. Moreover, there is the potential for this research to pay for itself as invisible tactical targets for the enemy require less bulky armour and relatively useless camouflage colour schemes.

This paper has thus laid the groundwork for testing other design styles and schemas that would create an invisible edge in military strategy. It is imperative that further funding and attention be paid to this potent branch of quasi-optodynamics.

References

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