

Color Rhetoric Bibliography

Michael Wojcik

2 May 2008

Color Theory and Rhetoric

Color theory is as old as civilization itself; indeed, one of the metrics anthropologists use to gauge the degree of a culture's "development" (rightly or not) is the number of distinct colors it names (see the entry for *Cross-Cultural Research* below). And since ancient times commentators have ascribed to color a great range of symbolic, psychological, even supernatural attributes. For those with normal vision, color is at once omnipresent and ordinary, yet often moving, startling, engrossing—shifting between unremarkable and compelling, from just another sensory datum to an overwhelming intangible presence.

So it is unsurprising that color theorists have often identified affect and meaning in color. Yet despite contemporary interest in visual rhetoric, little has been written about color as a rhetorical device or vehicle. Color theories come from many other disciplines, but rarely do they address the use of color for persuasion, except in some limited senses: appealing colors for branding purposes, for example, or the use of bright colors to attract attention. Here, then, I have mostly gathered works on color theory from related fields: art, design, history, philosophy and critical theory, and various sciences, with an eye toward synthesizing a rhetorical theory of color.

Sometimes these theories correlate well; at other moments they present radically different, even incommensurate, conceptions of color. Generally speaking, there are three major intellectual orientations from which color theories are produced, at least in the European-derived tradition; and they differ significantly in how they conceive of color as a phenomenon. Philosophical approaches, from figures as diverse as Pythagoras and Wittgenstein, seek to create an intellectually rigorous description of color. Art and design, on the other hand, are interested mostly in the application of color; while artists have offered many theories of color as essence or attribute, usually they are ultimately concerned with its effects. And scientists have been interested in the mechanics of color: the physics of light, the reactions in the retina, the operation of the visual cortex. Thus color theories disagree on the extent to which color is objective or subjective, how much of color is an attribute of things in the world and how much it is an artifact of human perception; on where color inheres—in physics, physiology, or phenomenology, or some combination of the three.

Conflicts and Connections

Some particular correspondences and tensions among the pieces are worth noting. Blair questions whether visual argument of any sort exists, for example, while Joseph documents what he seems to claim is a position in an argument established solely through the use of color, which would seem to be a rather striking example of just what Blair is looking for. It's true Rauschenberg's *White Paintings* can only be interpreted as an argument by experts in a narrow field, but the same can be said for many arguments in specialized disciplines. And of the philosophical pieces, the prize must go to Gage's *Color and Meaning*, which calls contemporary Continental theory to task for its failure to take color seriously.

I was gratified to finally find some pieces that directly address color as a rhetorical element. Those include Lichtenstein's thesis on the reclamation, in early modern France, of color as a symbolic register; the very useful piece by Richards and David on color as a rhetorical feature specifically of

web pages; and Courtis' terrific and wholly unexpected rhetorical analysis of color in financial statements—a genre that is hugely important and, I suspect, rarely examined by rhetoricians.

A number of the pieces below represent attempts to sketch out a cultural history of color, in some domain. Brusatin looks at particular moments in the history of European color. Taussig contrasts modern mainstream European ideas about color with the radical proposals of Leiris and some non-European conceptions. Lichtenstein looks at one key shift in European color philosophy. The most sweeping of this category, though, is Finley's fascinating, if decidedly breathless, sweeping account of color across world history. While Finley can obviously do no more than pick out interesting moments and highlight trends, he does manage to pack quite a number into a journal article (citing nearly 200 sources in the process).

An interesting genre is the discussion of optical illusions, such as the eChalk and Lottolab websites. While they might seem like diversions with little theoretical weight, the illusions on the one hand represent an object of study that has intrigued color investigators since ancient times, and on the other demonstrate how color is subjective and contingent. Illusions have often led color theorists to view color as elusive and magical, with power over basic mental function (an intellectual trend that Taussig endorses and Gage resists). Thus even though the illusion-researchers adopt a scientific stance, they are in some ways opposed to the scientific attempts to tame and cultivate color, exemplified by sources like Byrne and Hilbert, Stromer and Baumann, Smith, and Kuehni. But even the last, who fills his first chapter with diagrams of the power spectra of black bodies and the like, opens it with epigraphs from Democritus on the conventional nature of color, and from the Tun-huang manuscript: it is neither the flag nor the wind that waves, “it is your mind that moves”.

Color theory likes three-part arrangement, and trinities like art, philosophy, and science, or physics, physiology, and phenomenology, are widely represented here. These tripartite divisions serve like the orthogonal axes of spatial geometry to stretch out the space of color as lived experience. In seeing how color operates simultaneously along these different dimensions, we can see the possibility that color is meaningful—that it participates in the processes of our meaning production—and so that it is rhetorical. The selections below represent just a small sample of thinking on color, but a varied and, I hope, representative one. While only a few of them address rhetoric directly, or even discuss rhetorical functions such as persuasion in any great detail, together they map out some of the space that is color theory, upon which any rhetorical theory of color must be founded, and to which it must account for itself.

Toward a Rhetoric of Color

Many of these materials are quite fascinating, and it's tempting to simply extract ideas from them and apply them rhetorically; but (thanks to the “Science Wars” and similar debacles) we know the many pitfalls of such an incautious approach. The scientific and mathematical theories of color need to be well-understood and situated appropriately before being incorporated into a rhetorical theory, certainly, to avoid the risk of claiming unfounded epistemological standing. Similar care is appropriate for historical and anthropological material, since it often makes similarly strong truth-claims.

That said, the very slipperiness and uncertainty of color grants a certain latitude to philosophers and theorists, as essays like Taussig's demonstrate. Color is perhaps best understood as a subjective phenomenon with an objective stimulus (light and the human visual apparatus) and strong cultural associations. And as the same can be said of language, color is not such a very different sort of object of study for rhetoricians. I think it's fair, then, to work from these materials toward a theory of the rhetoric of color—provided we always keep in mind the provisional, speculative nature of most of what we say about color.

What might such a theory incorporate?

It would, I think, incorporate all the traditional categories of color theory. From science it would draw a *techne* of color, and perhaps theorize about non-conscious responses to color. From art, it would take a stylistics of color—color aesthetics, the deployment of color for emotional effect, color and usability, and so forth. And standing upon the craggy edifice of the philosophy of color, rhetoric could offer its own critical and cultural speculative theories of color as an aspect of lived human existence, of how it feels to live in a world of color and what that means for the production of meaning (which which, I believe, rhetoric is ultimately concerned).

Meanwhile, rhetoric could inquire into the cultural history of color, the anthropology of color, empirical studies of reactions to color, marketing and advertising and other fields to construct a practical understanding of how color is actually used to influence ideas. How, in other words, *have* people argued with color, and how successful have they been?

The Bibliography

I have grouped the works below into several categories, based largely on the taxonomy I described above. Many arguably fit into more than one category. I've tried to choose the classification most central to the work, or where I think the work has the largest impact; but it would be preferable to eventually convert this bibliography from a static text into a dynamic document that would permit works to appear in multiple categories (much as, say, the Zotero bibliography tool does).

Philosophy of Color

Blair, J. Anthony. "The Possibility and Actuality of Visual Arguments." *Visual Rhetoric in a Digital World: A Critical Sourcebook*. Ed. Carolyn Handa. Boston: Bedford / St. Martin's, 2004. 344-363.

A philosopher specializing in informal logic and argument, Blair asks whether visual arguments are possible, and if so whether any actually exist. This is an important, even necessary, piece to respond to in developing a theory of the rhetoric of color, since rhetorical color presupposes the more general category of rhetorical image.

Gage, John. *Color and Meaning: Art, Science and Symbolism*. Berkeley: University of California Press, 1999.

This philosophical treatment of color is dense and complex (Gage begins his introduction by describing the deficiencies of the deconstructionists in their writings on the subject), but worth the effort; Gage defines a historicized "semiotics of color", working primarily from theories of art, but also accounting for broader cultural phenomena as diverse as the use of prisms and spectacles (that is, eyeglasses). Gage is working against the philosophical tendency to see color as "bottomlessly resistant to nomination", to treat color as an indescribable immanence. *Color and Meaning* has some of the same flashes of insight as Taussig's essay, and some of the historical richness of Finlay's, but it's probably the most philosophically rigorous piece in this list.

Taussig, Michael. "What Color is the Sacred?." *Critical Inquiry* 33 (2006): 29-51.

In 1938 the philosopher / ethnographer Michel Leiris asked "what color is the sacred?". Taussig moves from the color theories of Goethe and Proust, to the entry of color photography into the canon of high art, to alchemy and color chemistry, to Burroughs and marginality, to

Leiris, and on from there. He claims color has served to bridge the abstract and the concrete - between, say, primitivism and colonized peoples, between the idea of memory and memories, between the names of colors and their visual sensations. A cultural anthropologist, Taussig associates color with "magical polymorphous substance", a numinous material, capable of becoming anything, that some South American shamen believe fills their bodies. Ultimately, what draws him to color is its "mix of depth and transparency": the way it can be at once a simple, direct, visual experience, and at the same time be something magical and impossible to completely grasp. A fine example of contemporary philosophy of color and of the force of color in the imagination - which implies rhetorical power.

Science of Color

Byrne, Alex, and David Hilbert. "A Glossary of Color Science." *Color Glossary* 1997. 21 Mar 2008 <<http://tigger.uic.edu/~hilbert/Glossary.html>>.

Simply a glossary, as the title states, and useful as a reference. (How can you talk about color without knowing what Bezold-Brücke hue shift is?)

"Colour Order Systems in Art and Science (English, Français, German)." 21 Mar 2008 <<http://www.colorsystem.com/index.htm>>.

A collection of color resources, mostly related to color systems. Somewhat like an online version of the Stromer and Baumann book; in fact it includes a similar historical survey of color systems. Includes some simple interactive Java applications for exploring a color space (though these aren't actually very interesting). Also includes links to some other online resources. Useful for many of the same reasons as Stromer and Baumann, but also has interesting summaries of cultural interpretations of color for a number of cultural sites (European, Chinese, Hebraic, etc).

Cross-Cultural Research. 39.1-39.2 (2005).

A two-part special issue—ten articles in all—on the anthropology of color naming. Kimberly Jameson's introduction ("Introductory Remarks on Cognition, Culture, and Color Experience", 5-9) makes it clear that mainstream anthropologists still consider color naming an important area of study.

Dolores Labs. "Dolores Labs Blog > Blog Archive > Where does "Blue" end and "Red" begin?." *Dolores Labs Blog* 17 Mar 2008. 19 Mar 2008 <<http://blog.doloreslabs.com/?p=11>>.

An informal experiment: using Amazon's Mechanical Turk to farm queries out to thousands of respondents, the investigators asked respondents to name randomly-generated colors. Then they map the responses onto a color wheel. It's an interesting view of how the surveyed population organizes color, how likely they are to use simple versus qualified ("light magenta") color names, how likely they are to use uncommon color names ("cerulean"), and so forth. They also provide tools for mining the data set.

Franklin, A. et al. "Categorical Perception of Color Is Lateralized to the Right Hemisphere in Infants, but to the Left Hemisphere in Adults." *Proceedings of the National Academy of Sciences* 105.9 (2008): 3221-3225.

Infants use the right side of the brain to group colors into categories. Adults use the left side of the brain. The evidence suggests this is conditioned by learning terms for colors - that is, language trains a different part of the brain to group colors. Why is that important? Because it shows how fundamental the connection between color and language is: it actually alters brain function. And that, in turn, suggests that color could have language-like functions, such as

rhetorical ones.

Jones, Iestyn. "eChalk: optical illusions." *eChalk Ltd.* 19 Mar 2008

<<http://www.echalk.co.uk/amusements/OpticalIllusions/illusions.htm>>.

Some of the illusions on this site come from Lottolab, but there are also some other classic illusions, some of which are based on color perception. Others aren't especially relevant to color research, though they're interesting in their own right. Some are reminiscent of the American Op Art movement, which (like some of the other color-combination works of abstract art) could be considered arguments made with color.

Kaiser, Peter K. "Physiological response to color: A critical review." *Color Research & Application* 9.1 (1984): 29-36.

A old but often-cited review on this topic, which is clearly central to the question of color rhetoric. Color is only rhetorical if it has psychological weight; and if it has psychological weight, it should (some would say must) have physiological effects as well. Kaiser finds that there do appear to be "reliably recordable physiological responses to color" (aside from the obvious visual ones), which may be "mediated by cognitive responses".

—. "The Joy of Visual Perception: A Web Book." 27 Feb 2007. 21 Mar 2008

<<http://www.yorku.ca/eye/>>.

A series of mostly short chapters (many no more than a page) on various topics in vision science. Focuses mostly on physiological phenomena, including optical illusions and the like. Not tremendously useful, but Kaiser does return to the topic of physiological reactions to color, the subject of his review essay cited above.

Kuehni, Rolf G. *Color: An Introduction to Practice and Principles*. Hoboken: J. Wiley & Sons, 2004.

A primer in 170-odd pages to color intended for a variety of disciplines, from artists and designers to vision researchers and industrial chemists. Discusses technical topics such as color physics and perception, the mathematics of color, and color chemistry, then delves into color theory for art. Includes many short digressions on topics such as color video equipment. Kuehni's overview, despite its short length, is probably the broadest treatment of contemporary thinking on color I've seen. It's particularly useful as a reminder of the range of specializations interested in color.

Lotto, R. Beau. "enter lottolab.org: research into vision and complex systems." *Lottolab*. 19 Mar 2008 <<http://www.lottolab.org/>>.

Lotto and his collaborators have compiled a collection of unusual optical illusions, many of them based on color. In particular there are some impressive examples of how adjacent colors affect the perception of hue, saturation, and brightness. The site also includes information on the researchers' publications on perception and educational projects. Good examples of cases where physiology and phenomenology trump physics in color perception - though the question of where the discrepancies emerge remains open.

Smith, Glenn S. "Human Color Vision and the Unsaturated Blue Color of the Daytime Sky." *American Journal of Physics* 73.7 (2005): 590-597.

Smith lays out the theory and experimental results for answering the quintessential color question "why is the sky blue?". AJP is a teaching journal (it's published by the American Association of Physics Teachers), so his focus is on helping physics students explore the

problem. For me, though, this piece is an occasion for seeing how the three domains of color - physics, physiology, and phenomenology; or the world, the body, and the mind - interact in this simple and familiar case. Smith explains the interaction of the physics of light and the physiology of color perception; in omitting consideration of the role of the mind, his article opens the door for just such speculation.

Stromer, Klaus, and Urs Baumann, eds. *Color Systems in Art and Science*. Trans. Randy Casada. Konstanz: Regengoben Verlag Klaus Stromer, 1996.

A collection of short (typically four-page) descriptions of various systems of color created in the European tradition, from Forsius through the contemporary RGB, HLS, and CMN systems. Clearly illustrates the many divergent attempts to formalize, theorize, and understand color - and the failure of any of them to be entirely satisfactory. This collection serves as a nice short history of the idea of color in Europe.

Color in Art and Design

Color Marketing Group. "Color Marketing Group." 19 Mar 2008 <<http://colormarketing.org/>>.

"Color Sells, and the 'Right' Colors Sell Better". That's the heading at the top of the CMG site, and who could ask for a better declaration of the rhetorical effect of color in marketing? The CMG is famous for predicting "color trends" for the upcoming year, which they associate with other cultural forces - so, for example, popular environmentalism makes some greens prominent in this year's colors. While CMG is non-scientific and non-academic, their work does support the argument that color has psychological and rhetorical effect.

Cortés, Claudia. "COLOR IN MOTION / Main." *Color in Motion*. 21 Mar 2008 <<http://www.mariaclaudiacortes.com/#>>.

A Flash application that bills itself as "An Animated and Interactive Experience of Color Communication and Color Symbolism". Through a film metaphor, hues are personified: red is "rebellious", "joyful", "visible", etc. The application is divided into three areas: one to "meet the stars" (ie, the featured hues) and view cultural associations, one with short films illustrating the attributes ascribed to them, and a "lab" where the user can experiment with the application's framework. Not scholarly, but an interesting conceptualization of color as a repository of symbolic meaning.

Farago, Claire J. "Leonardo's Color and Chiaroscuro Reconsidered: The Visual Force of Painted Images." *The Art Bulletin* 73.1 (1991): 63-88.

Farago's concern is Leonardo's conception of painting "as a physical, mathematical science", which involved both "qualitative ... and quantitative aspects". She argues that Leonardo's definition of painting was highly influential, and that it posited visual art as a form of knowledge. This scheme analyzes the production of visual effects through the physics of light and the physiology of vision, but goes on to identify in those effects important psychological effects ("visual force", in Farago's terminology). While Farago does not make an explicit connection to rhetoric or argumentation, this piece does show that Leonardo (like the French paintings Lichtenstein discusses) acknowledged the power that color had over the audience.

(New York) Museum of Modern Art. "Color Chart: Reinventing Color from 1950 to Today." 18 Mar 2008 <<http://www.moma.org/exhibitions/2008/colorchart/flashsite/>>.

A Flash interactive catalog for an exhibit at MoMA, collecting abstract color art since 1950. As the introduction suggests, these pieces can be seen as making arguments about color, using

color.

Strickland, Carol, and John Boswell. *The Annotated Mona Lisa: A Crash Course in Art History from Prehistoric to Post-Modern*. Andrews McMeel Publishing, 1992.

This overview of the development of the visual arts in Europe and the US is useful for comparing the different ideas regarding color in painting espoused by the major schools and artists, and for comparing in particular the various abstract and stylized modernist movements (abstract expressionism, op art, etc), where color could actually serve as the primary or sole channel of artistic expression.

Cultural History of Color

Brusatin, Manlio. *A History of Colors*. Boston: Shambhala, 1991.

A philosophical and historical essay on color. Often dense and obscure, but contains interesting ideas and anecdotes (some perhaps dubious), such as the associating the eternal argument between color as an innate property of an object, and color as a perception, with the question of lighting (ie, thinkers who consider lighting treat color as perception).

Elliott, Charlene. "Color Codification: Law, Culture and the Hue of Communication." *Journal for Cultural Research* 7.3 (2003): 297-319.

Newman ("Kill the 'Mere Color' Rule", cited below) argues in favor of extending intellectual-property law to cover colors, at least in limited circumstances. Elliot argues the converse: legal protection for colors would adversely affect the free and abundant use of color in contemporary culture. Like Newman (and many other authors listed here), Elliot believes color has signifiatory power; that's precisely why she argues that it should not be constrained by the courts. In effect, Newman asks for *de jure* recognition of a *de facto* condition (color has meaning, so treat it as similar to words), while Elliot wants to prevent the likely result of such recognition.

Finlay, Robert. "Weaving the Rainbow: Visions of Color in World History." *Journal of World History* 18 (2007): 383-431.

Finlay starts with the classic subjective / objective divide in color theory - specifically with Newton versus Goethe - and then moves through all sorts of interesting topics, like the evolution of color vision, the material history of pigments, treatment of color in various cultures around the world, etc. This article is very useful both for its enormous scope (around the world and across all of biological development) and its collection of fascinating examples. Finlay identifies both universal attributes of color and ones that are culturally specific, and so provides a touchstone for analyzing color theories for their subjective and contingent assumptions.

Newman, Stephen J. "Kill the 'Mere Color' Rule: Equal Protection for Color under the Lanham Act." *The University of Chicago Law Review* 61.4 (1994): 1595-1626.

Newman argues that trademark law should apply to colors in some cases, on the grounds that it already applies to some non-verbal forms of expression (eg logos), and that a color can be a signifier.

The application of trademark law to color is interesting for my purposes in part because it recognizes the signifiatory power of color, which is necessary (if not sufficient) in demonstrating color's rhetorical standing. But more than that, to argue that color can be subject to trademark is to acknowledge that color is more than its scientific component. If color were solely "in the world", an effect of physics and physiology, then it could no more be subject to trademark

than a mathematical formulation or a natural object can be. Allowing color to be trademarked recognizes the creative, hence psychological, dimension of color. (On the other hand, Newman discusses how the physics and physiology of color weigh against some of the legal doctrine he opposes, such as the “color depletion theory”.)

Another interesting item in this piece: Newman describes the framework developed by Judge Friendly in *Abercrombie & Fitch*: “a single mark ... can be generic, descriptive, suggestive, or arbitrary”. This could be a useful scheme to cite in discussing the range of expressive power of various rhetorical elements (*ie*, in talking about color versus text as rhetorical vehicles).

See also Elliot, “Color Codification”.

Rhetoric of Color

“AbbyNormal”. “Portraiture and Color in Visual Rhetoric | Kenneth Burke and Contemporary Rhetorical Theory.” *Kenneth Burke and Contemporary Rhetorical Theory*. 21 Mar 2008 <<http://www.digitalparlor.org/fa07/blakesley1/node/240>>.

A short blog post wondering about the symbolic use of color as a rhetorical element, in relation to Burke's theory of portraiture. Not much here, but it is an example of someone at least considering the idea of color as rhetorical.

Courtis, John K. “Colour as Visual Rhetoric in Financial Reporting.” *Accounting Forum* 28.3 (2004): 265-281.

Courtis notes the documented psychological responses to color and color's cultural associations, and suggests how they can be applied for rhetorical effect in one particular (and perhaps unexpected) genre. This is one of the few pieces I found that explicitly ties color to rhetoric. It's also empirical; Courtis describes experiments designed to detect whether color can condition a reader's response to financial statements. Courtis finds that color is widely employed in the accounting genre, generally on the recommendation of color consultancies or other design experts, but has received little study. The experiments support the hypothesis that color affects the reception of financial information, even to the extent of influencing behavior.

Hart, Geoff. “Some thoughts on visual vocabulary, grammar, and rhetoric.” *Geoff-Hart.com* 2007. 21 Mar 2008 <<http://www.geoff-hart.com/resources/2007/visual.htm>>.

A short essay, originally published in *Intercom*, on visual vocabulary and visual grammar as prerequisites for defining visual rhetoric. Useful as a starting point for considering the roles of visual vocabulary and grammar.

Joseph, Brandon W. “White on White.” *Critical Inquiry* 27 (2007): 90-121.

Joseph's cultural analysis of Robert Rauschenberg's *White Paintings*—which are simply white paint on white canvas—demonstrates how Rauschenberg created them to explore and comment on the possibilities of abstract art; how they were part of a productive conversation Rauschenberg was having with John Cage and other abstractionists, and with the art world at large. Here color is argument, pure and simple, in a communicative situation where so much meaning has been attached to color that it has epistemic semiotic range.

Lichtenstein, Jacqueline. *The Eloquence of Color: Rhetoric and Painting in the French Classical Age*. Berkeley: University of California Press, 1993.

Lichtenstein's study is an attempt to do something similar to what I'm trying to establish in this project, albeit mostly in relation to a different historical moment. She sees the French painters in

the 17th century as attempting to use color in innovative ways in order to bridge the gap between rhetoric and the visual arts. In particular, she theorizes that prior to this period, European painting was dominated by the subordination of color to design, and that followed from the Socratic-Platonic rejection of the Sophists as employing rhetoric for ornamentation and base effect. Then in the 17th century, Lichtenstein claims, images are recognized as important participants in meaning-production, particularly for reconciling reason and emotion, and color is reclaimed as a valid rhetorical register.

Lichtenstein prefers “eloquence” to “rhetoric”, but that's a minor terminological quibble, as far as I'm concerned. The real importance of this work is that it's a strong claim that color has rhetorical standing, and even epistemological standing, and in fact that meaning-production always involves extra-linguistic elements, among which color is prominent.

Richards, Anne R., and Carol David. “Decorative Color as a Rhetorical Enhancement on the World Wide Web.” *Technical Communication Quarterly* 14.1 (2005): 31-48.

Richards and David consider color specifically as a “decorative” element, which they say can “elicit emotion-laden reactions”—in other words, act as rhetorical *pathos*. They further emphasize the significance of *pathos*, noting that emotional reactions have been shown to precede and influence rational ones, and describing color as “a complex rhetorical phenomenon”. This is another of the relatively rare essays that explicitly identifies color as rhetorical. It's also directly relevant to the candidate-websites project, since it's specifically concerned with the use of color on the web.

Romano, Andrew. “Stumper : Expertinent: Why the Obama “Brand” Is Working.” *Newsweek* 27 Feb 2008. 19 Mar 2008
<<http://www.blog.newsweek.com/blogs/stumper/archive/2008/02/27/how-obama-s-branding-is-working-on-you.aspx>>.

Romano is broadly concerned with Obama's marketing and design, and only addresses color briefly. But this article (mostly an interview with Michael Bierut) is directly relevant to the candidate-website project. And marketing is a rhetorical endeavor: it seeks to establish ethos (the brand becomes an authority) and it operates through tropes such as repetition. Since politics (in the narrow sense) is the ur-locus of traditional European rhetoric, this article usefully ties together marketing, traditional rhetoric, contemporary visual rhetoric, and specifically features such as color and type.

Singh, Satyendra. “Impact of Color on Marketing.” *Management Decision* 44.6 (2006): 783-789.

From Singh's abstract: “People make up their minds within 90 seconds of their initial interactions with either people or products. About 62-90 percent of the assessment is based on colors alone.” If that's true of even a significant minority of our interactions with visual media, and even if we read “make up their minds” conservatively as “establish their initial emotional orientation toward the text and material”, color is tremendously important in establishing the goodwill of the audience—in gaining footing for ethos, in other words.

Some of Singh's piece is questionable or too thin to be useful, such as his opening gloss of color science. And the main text of the article contradicts the bold claims of the abstract, to some extent: Singh keeps repeating his mantra that “color [theories] are controversial”. He ultimately suggests that color use in marketing must be based on cultural contingencies, though he also proposes that US media dominance will eventually make US color preferences essentially universal.