# Information Design.

A primer for the post-digital era

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### 1. Why Information Design

Information design is a cross-disciplinary field that involves several, and often widely differing, subject areas, from way-finding at an airport or within a shopping mall, to maps, e-forms, and consumer psychology. At its heart, information design is a method of providing its consumers — individuals, citizens, governments, businesses, policy makers, family units — with presentable information that supports decision-making or at the very least, an understanding of the matter at hand. Designing a document, much like designing the world around us, requires communicating meaning, which does not necessarily translate homogeneously across a group. Information design is primarily visual in approach, though this is not always so. Literacy in information design is typically textual or graphic.

Words and images (including film) work together on the page (or on the screen) to communicate a clear picture of the intended content. The printing press revolutionised communication: newer ideas about information roles, planning and design layout; the introduction of better and faster delivery systems including newspapers and telegrams; alterations in reading habits and the consumption of languages, signs, and symbols; the very institutionalisation of related technologies like typesetting and image-making. Such revolutionary technologies typically bring novel dimensions and refreshed dynamics, not so much to the machinery itself but to human cultures and societies.

The printing press process, normally accredited to Gutenberg and Europe in the mid 1400s, type was in fact a well-established technology in Korea 400 years earlier. The process, extant in Jikji scholarship and apprenticeship from the early 11th century, and later in China up to the late 20th century, required cutting glyphs from wooden plates, and drilling and refilling holes to correct errors. In writing about typography and the printing press, Bringhurst suggests 'text...was treated just like woodcut illustrations. To this day, a page of type is known in Chinese as "huoban" the living plank.1 Bringhurst pays homage to the Chinese engineer, Bi Sheng, whose contributions to moveable type in the 1040s eventually led to its intersection in the 13th century with the roman letter. Somewhere along this journey, from China to Rome, and from the 11th century to the 21st century, the printed word began to impregnate human kind with a renewed sense of power and politic over the world and its inhabitants. Starting in Venice in the mid-1400s and radiating outwards to the rest of Europe, these emissaries of power and information reached the farthest corners of the world on the backs of ships and caravans that bore new ideas of civilisation, religion, commerce, and conquest. Carl Jung stated 'if people observe their own unconscious tendencies in other people, this is called a projection,' and any political agitation in all countries is [also] full of such projections...2 Indeed the manifold journeys of migrants, merchants, missionaries, monks, and mercenaries exported their region-centric ideas and projections on the countries and cultures with which they came to trade and raid. This exchange led to the same information presented in myriad forms and qualities, dictated by the cultures that became their own lenses through which truths and realities came to light. Information design highlights the need for cultures and communities to transfer meaning through symbols, signs, form and language.

### 2. Design Versus Art

Art and design are different, but this distinction is not that obvious till we apply a framework within which to assess what defines and distinguishes a piece of art from an object of design. Art is form in its subjective interpretation, i.e. art is aesthetically driven. Since beauty is in the eye of the beholder, a piece of art is typically subjective. Design is about function, i.e. design fulfils a purpose that is almost always objective. This difference between the two is better highlighted in an example: taking the case of a remote control for an entertainment system, a gloss black, beautifully cut, and weighted device in the palm of your hand will certainly meet a criteria for an individual's aesthetic expectations, whereas another might prefer a matt silver finish, bevelled edges, and light, feathery feel. The beauty or art of the remote control is roundly subjective, affirmed only by the opinion of the beholder. If, however, a

<sup>&</sup>lt;sup>1</sup> Robert Bringhurst, The Elements of Typographic Style (Vancouver: Hartley & Marks, 2016), 119.

<sup>2</sup> Carl J. Jung, Man and His Symbols (United States of America: Dell Publishing, a division of Random House Inc, 1968), 179 – 181.

remote of any shape, size, and colour, were unable to control an entertainment system — if the pause and play buttons were different, the forward and rewind buttons switched, and the infrared receiver required perfect line of sight, the remote would in all aspects be a failure since the function of such a device is to operate a system. If it does not do so, then it fails as an object of design, despite its form, or appearance. Similarly, a painting or sculpture is a piece of art if form is its priority. But if the piece were to perform a function or objective, then rules of design would dominate, and that means form is subsumed by function; aesthetics serve to enhance the function of an object, never to interfere with or impede its operations. Information design is, at its essence, an objective requiring fulfilling. Colour and size in a presentation are only of primacy in a situation where the slides intend to communicate art. If the purpose is to facilitate an understanding of the content, then colour, size, typeface, timings, are selected strictly to facilitate comprehension. Any attempt at beautifying for the sake of beauty itself opens up the presentation to subjectivity.

### 3. First is Reason, Second is Rhetoric

Whenever we watch a presentation, or a movie, or look at a visual advertisement, it is important to know that everything in that frame or still-capture is there for a reason. No matter how small any of the object(s) may be, everything has been placed there to reinforce the messages that each piece of content is driving. This seems simple but is in fact a highly effective skill — everything has to be there for a reason, be it a word, punctuation mark, font-size, or line-spacing — everything has to be there for a reason. This is to reinforce the message that we are putting out. It is also to take full control of the communication process. The nature of digital content is such that people will always talk back.

But they may not always talk back to you. We need to accept that this is the way our communities will work. Therefore, by taking control of every piece of information in our content, we place ourselves in a stronger position to influence how audiences and communities will reply and to what extent we will become regulators in the conversation. Also it is important to know who these people are in our communities of information. There is a difference between consumers and customers. A customer is already buying your information and is interacting with you. Consumers, on the other hand, are those who have never used your product or service, but are interested in what you have to offer. Design for the consumer, because this wider pool of people is responsible for creating customers. Note that each customer is a consumer, but not every consumer is a customer. Before starting any design processes, first consider who your consumer, is then cast the widest possible net over your consumers. Design for the larger community and you will get a larger volume of engagement. Information design makes meaning of data. Good information designers will design for maximum meaning-making in the mind of the consumer — the one that is looking first for relevance, then rhetoric, since information design is information legibility, credibility, and reliability presented in visual spaces.

### 4. Information Design in Digital Content

Digital content comprises two separate terms — digital and content. Of these two, digital is the tool or basic facilitator, whereas content is the primary source of information. Content is about patterns which lead to engagement. Engagement for whom? And from where? To be a great content creator, we need to first become experts at identifying design patterns of human engagement. Following that we can begin to influence patterns of engagement. It is therefore important for information designers, i.e. (creators and curator of content) to identify patterns of engagement and basic human thought processes. In other words, the human mind thinks in certain ways. Understanding these hard-wired rules makes us better at influencing human minds. Pattern recognition and engagement are natural, organic ways to have people relate to our content. The inclusion of human beings in an image or in an article makes that piece more engaging. This is because we see ourselves in there or others whom we know and can relate to. When this happens, we get a heightened urge to share. This makes content personal. Digital content is an intensely personal medium, one that allows us to interact with our audiences and to talk back.

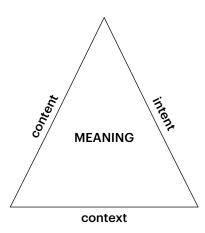
### 5. Images as Information Units

The mind thinks in pictures, not in words. Gaining an understanding this simple truth can really make an impact on the engagement levels of your design and content. Because the mind thinks in pictures, not in words, it is images that provide engagement since that is the mind's native way of processing information. Start by selecting the image that you would like to place in your audience's mind. Then find that image or get a professional photographer to create the image for you. Once that is done pick a keyword that will reinforce the image's story in the minds of your audience. Always go with images first, then build the words around the image.

Don't try putting words into people's minds without first considering the picture you want those people to have. This is because a picture is worth a thousand words, but one carefully chosen keyword can paint a thousand pictures. It is our duty as designers of information to influence which image should stick and which ones should be discarded. Always start with the image first, whether you are laying out a visual, producing videos, or doing a presentation to varied audiences. Then choose a keyword to match and reinforce the image in your consumers' minds. Images tell powerful stories so spend time over the image you want to anchor in your consumers' minds.

### 6. Content + Intent + Context

The performance of information design, like other design systems, requires a model to intercede on the designer's behalf — to broker a relationship between texts and audience understanding. The *content* + *intent* + *context* model is a useful determinant of this relationship. To assume that content alone is sufficient towards generating meaning is to risk adopting a narrow view of information design. Content is not born in isolation, and meaning is generated through rich, multilayered communication experiences. Let us examine what each of these three terms mean, and understand how each of their functions conflate to create meaning. When defining content it is useful to consult McQuail's discourse on content analysis in which he observes that 'we need descriptions of content which are at the same time descriptions of audiences, since audiences are often defined by what they attend to and by little else.<sup>3</sup> Within the broadest definition, content may be considered to encompass anything that has ever been created. This includes words, images, and movies, and also extends to objects, ideologies, and memories. The question is: what gives content its quintessence? Put another way, at what point does content start to become meaningful? To answer this let us for a moment complete a thought experiment. Consider the word 'park'. The term comprises connotations: public gardens and playgrounds (noun); spaces for cars (noun); setting something down or bringing something to a sustained halt (verb); a common Korean surname (noun). All of these definitions are acceptable, but none provide any meaningful conclusion about what the term park is referring to — till we introduce an intent, which again by itself is of limited value. Is it the intention of the sender, for example, to: (i) refer to New York City's postcode 10025? (ii) issue an imperative to a driver? (iii) call out to a friend?



<sup>&</sup>lt;sup>3</sup> Denis McQuail, Mass Communication Theory: An Introduction (Sage Publications, 1983), 123.

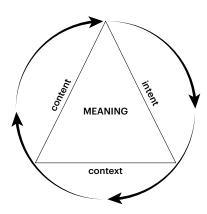
Content by itself is practically worthless without understanding the intent of the sender, and intent is quite impossible to figure out without the third component of the model — context. Continuing with our thought experiment, let us consider the following list of terms and decide which type of park is being referenced:

- Cotton candy
- Ferris wheel
- Roller coaster
- Haunted house
- Bumper cars

Most would conclude, from these terms, that the list is referring to a theme park or an amusement park, and not a vacant lot outside a supermarket store, or the name of a businessman. The performance model of information design works on the premise that context will clarify intent, and intent will determines content. Useful meaning is therefore generated only when all of these three have been fully accounted for. Design mandates acknowledgment and articulation of all three components of the *content* + *intent* + *context* model to create meaningful relationships between texts and human beings.

While this model might be adequately understood and applied to all forms of information design, it is worth delving deeper to explore the relationships between these terms. Janet Holmes discusses how 'speech is both influenced by and constructs the contexts in which language is used, rather than the characteristics of the speakers.<sup>4</sup> The use of context and its impact on language (i.e. spoken language in Holmes's example) may be extended to designing information, whereby the designer effects, and is affected, by what has been created for an intended audience. Culture again plays a significant role in mapping the context of any communication to the intended audiences, but its significance is greater when one considers clarified information since the context typically requires a narrower focus if it is to communicate intention.

Jonah Berger asserts that 'almost by definition, communication involves an audience. People do not just share something, [instead] they share that something with someone.'<sup>5</sup> This basic relationship speaks volumes to the function of information design, which we have defined as establishing a meaningful relationship between texts and human beings. Berger's statement also raises another vital point: designing for clarity is not the sole domain of information designers. From presentations to public broadcasts, information designers deal as much in the spoken and aural medium as they do in the written and the sensory. This core principle of information design existing beyond the written word, and in fact beyond words themselves, is critical to building roundly feasible information documents. The *content* + *intent* + *context* model is easily diagrammed but much harder to define and explain its effectiveness and operability. When approaching the *content* + *intent* + *context* model proceed in both directions, forwards and reverse, to acquire a sufficient comprehension for each of the component of the model as a starting point for any design. Also consider the contextual component with equal weight. Work backwards to understand how content gains context from intent. The model has been expressed linearly but is better approached in its cyclic form.



<sup>&</sup>lt;sup>4</sup> Janet Holmes, *An Introduction to Sociolinguistics*, 4th edition, (New York: Routledge, 2013), 239.

<sup>&</sup>lt;sup>5</sup> Jonah Berger, 'Word of Mouth and Interpersonal Communication', in Michael I. Norton (ed.), Derek D. Rucker (ed.) and Cait Lamberton (ed.), *The Cambridge Handbook of Consumer Psychology* (New York: Cambridge University Press, 2016), 376.

### 7. Colour in Information Design

Colour is about psychology. The sheer scope and nature of colours make it impossible to discuss in full in this section. The primary question is: what difference will it make if I use blue over red, or a green over purple, or other colour combinations? The key to understanding colour is knowledge of four primary aspects that govern applications.

The design aspect of colour determines how content will appear when compared across screens — as digital art — and behind counters or supermarket shelves — as real, tangible items. Technology is as yet not developed enough to reproduce a perfect match from screen to print. In other words there will always be a discrepancy in the hue and shades between what you see on a monitor (RGB) and what you see on paper or other printed surfaces (CMYK). A skilled designer will likely be able to make these differences seem virtually imperceptible but a solid understanding of colour theory is a prerequisite for such skill. Choose your design carefully. The physical aspect of colour determines how people feel when they view your documents and slides. Certain colours have a soothing or organic effect while others are attributed as dynamic, synthetic and exciting. Below are some very basic attributes (not exhaustive) associated with common colours.

### Red:

strong, passionate, hungry, impulsive, powerful. Blue: serene, sad, dependable, safe, moderate. Yellow: warm, happy, clear, anxious, lively. Green: natural, youthful, sickly, economical. Orange: fresh, warm, exotic, frivolous, healthy. **Purple:** royal, dreamy, magical, elusive, gothic, luxurious. **Brown:** earthly, rugged, basic, durable, timeless, organic. Grev: neutral, formal, authoritative, dull, technological. White: clean, pure, stately, weak, light, inclusive. Black: formal, strong, death-like, stately,, dignified.

The attributes of each colour will vary depending on the exact properties defining that colour – hue, saturation, value, temperature. A deeper blue, for example, will be perceived quite differently to a lighter blue. Perceptions are also contingent on the use of colour in combinations with the other colours. Your brand personality must portray a colour or colour combinations that correspond to its desired attributes and characteristics. Cultural aspects of colour determine the association people make between your product or service and their individual cultural, religious, superstitious, social, and anthropological beliefs. Colours such as red are considered lucky in some societies but are a symbol of violence in others. Your design must take into consideration the colour connotations held by the societies or communities in which it operates.

Cognitive aspects of colour determine how people recognise and react to your designs. Since meaning is created in the mind, colour plays a strong part in determining the awareness and associations of that design in the minds of your consumer. When a design makes consistent use of a particular colour, the brand becomes associated with that colour. After some time, the brand will become immediately and thoroughly recognisable simply by its colour minus other factors. Achieving this state is beneficial for your design's dissemination and viewer perceptions.

### 8. Brand Methodology in Information Design

Your brand is not your product or service. It is how people feel, and what they think about your product or service. It is the recommendations they make to their family and friends about purchasing your product or service. It is the sum set of human characteristics akin to your product or service. An account of a design language for brands highlights informational aspects that drive meaning between your audiences and your messages, through sets of characteristics like fun, caring, bizarre, intelligent, sympathetic, inconsiderate, hypocritical, stubborn. These characteristics are what people think about when they engage with the information of a brand. When a sufficient number of consumers think of the same thing when they discuss your product or service, that becomes your brand. When most of your consumers attribute the same characteristics to your brand, that becomes your brand's designed personality. Over time, your brand personality will becomes your brand reputation, designed through the application of information characteristics that are presented visually and aurally through digital media. Brand personalities are typically easier to change and establish than brand reputations.

Once a reputation is formed, good or poor, it will require significant amounts of time and thinking to redesign. The only other option to change reputation is to let the brand die, along with its reputation. A solid brand personality, rooted in design principles that prize comprehension over aesthetics, will in most cases develop into a super-strong brand reputation that becomes almost impervious to occasional design mishap, or the counter-productive publicity stunt.

First frame your brand language through a solid design language. Decide what characteristics you will want associated with your brand. Then use design to insist on a consistent visual language across all your communication channels. Far too often organisations make the mistake of inconsistency across visual and aural channels. Consider an organisation that wants to communicate a welcoming, cherubic, trustworthy personality by putting happy and evocative images on their posters, but a very different personality comes through in their billing and fees material.

Such inconsistencies can severely damage brand personalities with their customers. What's even more tragic is the organisation's plummeting cost-benefit ratio. Considering the costs of information design, commissioning, and printing a poster, all in the name of creating a positive brand personality, it is folly to ignore the principles of information design in favour of subjective interpretations. As the saying goes, one seldom gets a second chance at a first impression. Choose your design language carefully when building brand personalities; keep in mind also that information design is not merely the presentation of information, but also includes the attitudes and mentalities afforded to content.

### 9. Graphical and Textual Literacy

An icon or a symbol has a communicative meaning beyond its representation. A yellow circle with two dots and an upward curve connotes happiness, the symbol being a popular manifestation in social and print media. Likewise, the emoji has become more than an icon, carving out and occupying a space as a distinct form of typography. It is possible to have sentences, and entire conversations, over SMS and chat apps using nothing but emojis. In appearance, the emoji is distinct from a sentence comprising of text in its traditional word form but its meaning is analogous with the latter. Graphical literacy thus is moving beyond text to image-based bits of data to create and communicate meaning. A large portion of information design deals with the visualisations of meaning, presented in both text and graphical formats. Both might convey the same message, yet the treatment of each is markedly different.

By graphical literacy we do not only refer to signs, icons and symbols but also the layout of pages and of screens. Robert Waller notes that page layout is about 'the arrangement of different text elements (for example, chunks of prose, illustrations, and headlines) within a physical frame such as a book page or a screen.'<sup>6</sup> Treatment of the page should be the same as treatment of its individual items. Most information designers easily see the value in organising all of a document's components — logo placement, pages and numbering, borders, column counts etc. Fewer extend such thinking to the page itself as a graphic in and of itself. Start with the essentials: portrait or landscape, page dimensions, colour and texture of the sheet, and materialities of the document contribute to the meanings that users draw during interactions. The emoji is now widely acceptable within the context of an SMS but has yet to find formality and acceptance on the printed page. Likewise, any transition from paper to screen creates tensions in the way users react to the information. Screens are responsive and their contents' dimensions vary with device width and height. Information is consumed across a broad range of media, which raises issues on design not only for audiences but also for appropriateness. A screen is a welcome opportunity for the emoji, and indeed other icons. Could paper soon follow?

<sup>&</sup>lt;sup>6</sup> Robert Waller, Graphical Literacies for a Digital Age: The Survival of Layout, in Information Society, 2012,

accessed at https://www.researchgate.net/publication/254335516\_Graphic\_Literacies\_for\_a\_Digital\_Age\_The\_Survival\_of\_Layout/

### 10. Copywriting in Information Design

The fundamental premise of copywriting is that of argument. Barring the common notion of a heated debate or series of boisterous exchanges, within the premise of copywriting, argument is a distinct facet of conversation, with the sole intention of gathering consumers to a specific point of view. Assigning copywriting to any circumstance thus requires the copywriter to build, launch, and so wherever possible win an argument over any of the decision-making parts of the consumer psyche. Remarking on the issue, Arthur Stone and Stewart Garrison proposed 'an argument is the endeavour to make the thoughts of other people conform to our own.' Stone and Garrison go on to claim that 'while it may be possible to mislead the thoughts of [people] with empty words, any advantage gained this way can only be temporary.'<sup>7</sup> It is of utmost importance for copywriters to heed the stringencies of both ideas introduced here. The first refers to the need for exercising an influence over the minds of people, in our case consumers. Persuading a consumer towards making a certain decision is the linchpin of copywriting, and the argument is its driving force. Every tool and device of copywriting, from taglines to packaging, exists in the form of an argument, either in favour or in repudiation of a particular point of view. In other words, copywriters are designers of arguments. It is argument, not words, that constitute the kernel of this business, emphasised in the second quote.

Words, images, sounds, tastes, smells, textures are merely the tools of copywriting, not its bedrock. To mistake words or any of the other tools as the quiddity of copywriting would be a grave error, and a primary causative of failure in this field. The sections on function and purpose of copywriting in this chapter delve deeper into the intricacy and impetus of argument as the cardinal approach to copywriting, we continue our previous discussion of text and examine how its persuasive qualities fit with culture and information design. A marker pen is a text only to those cultures exposed to its purpose and function, and consequently understood and, notably, agreed to its meaning. The same pen would be open to every manner of interpretation in any cultures that have never encountered the quotidian devices of our own civilisation. Walls, phones, peanuts, people, balconies, birds, and aeroplanes are all texts.

Language is a text for cultures that have formed meaningful relationships with myriad components (words, spelling, phrases, punctuation, idioms) as is the case with Mandarin, Hindi, French, Afrikaans, English, and Arabic. Every country is in fact a text. The planet is a text. Anything that generates and establishes meaning in the mind may be considered a text. How purpose and function are communicated, and meaning defined and agreed on, is the domain of language. To truly understand text and its effect on the mind, we turn our attention to the following exercise. Examine the item below. What does it mean to you?



More common answers from groups in Singapore who were given this exercise include: scribbles, Bengali, vines hanging from a branch, Hindi, alien hieroglyphs, modern art, DNA, and cake swirls. There doubtless exists several other definitions and varied interpretations which are contingent on the cultural context in which this query is made. The accepted or textual definition of this item is the character for 'no' in the second most spoken language in the world, Hindi. Cultures for whom Hindi is an association, this item makes perfect sense. In these culture, there exists a meaningful relationship between the item and its comprehension.

This item is a text. For those who are unfamiliar with the language, this item is not a text. There is no meaningful relationship that has formed in the mind. The basic lack of an authority association or denotative cultural meaning opens the way for multiple interpretations like leaf vines, scribbles and cake swirls. Ordinarily, this would be of little consequence to a tourist visiting the north of India, or to a room of students learning about culture. Exegesis of the troublesome item is most often achieved through a series of questions and answers.

When applied to copywriting, however, existing misinterpretation is not as readily solved, and is anathema to copywriters since any elucidation of ambiguous advertising content, brand intimations and collateral, and marketing announcements is seldom sought by our audiences. In the majority of such instances, murky and ambivalent messaging is simply abandoned as-is, typically precipitating in an impasse between the consumer and the copy. This is because when a consumer encounters an item

<sup>&</sup>lt;sup>7</sup> Arthur P. Stone and Stewart L. Garrison, Essentials of Argument (New York: Henry Holt & Company, 1916), 1.

and there is no meaningful relationship that forms, something remarkable happens. If a mind fails to understand an item's intended meaning it will, far from remaining blank, draw its own interpretations.

The mind cannot abandon something as meaningless, even if the items are described in so many ways. Human-beings are pattern-recognising creatures; human-beings are prone to sense-making of the world by exploring and seeking patterns to decipher meaning from them. When our early ancestors looked up at the stars they saw hunters, and bears, and carts, and ploughs; unsurprisingly since those were the items that defined their realities as hunters and farmers, and consequently was what they perceived from the dots of light scattered across the night. The aboriginal peoples of Australia saw the dark or negative spaces between the stars, yet they too perceived patterns of their own, such as emus, which (again no surprises here) tended to dot the landscape of their continent and the realities of their circumstances. Contemporary society is not immune. All of these defines the current era — mathematics, computing, algorithms, design, broadcasting, space exploration, architecture — may be fundamentally categorised as pattern-discerning activities. The evolution of language into a global conduit urges ever-increasing cross-cultural relationships between texts and human beings. Information design acts as mediator and modulator of this relationship.

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