# SketchyTruth

Somewhere in between the good news and the bad news lies the truth

(A concept for a cartooning application on mobile devices)



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# CERTIFICATE OF AUTHORSHIP/ORIGINALITY

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signature of Student

Production Note: Signature removed prior to publication.

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# Abstract

SketchyTruth aims to explore through user-generated cartoons the hidden 'truths' between news headlines.

In an increasingly visual culture cartoons are centrally positioned to act as decoders of mediated information laden with public relations and political spin. By reframing the news through cartoon drawing in an online, interactive and social context we will be able to uncover meaning in reportage that current forms of news transmission cannot do.

A conceptual model is proposed for collaboratively reflecting upon the news and its social effects. It seeks to leverage the power of distributed knowledge and harness collective wisdom in reconstructing an alternative picture of the news.

The conceptual model discussed in the exegesis forms the basis for SketchyTruth – a concept for an application on smart mobile devices. Citizen journalism and social media are recast into a visual alternative – 'citizen cartooning'. It examines the intersubjective space in between the good news and the bad news, where conversation and contemplation thrive. Citizen cartoonists will be invited to reinterpret, remix and repackage the news.

In visual confections where the whole is much more than the sum of its parts, an aggregate cartoon interpretation of the news may actually help us see the issues beyond the headline more clearly.

Images can serve as tools for making sense out of the complexity, social variance and uncertainty in the news networked information space. In a mobile digital world of conjecture, confluence and confection, a world of relative truths, the cartoon image can act as our guide and beacon.



# Introduction

# The journey

IN CONCEPTUAL ART, THE IDEA OR CONCEPT IS THE MOST IMPORTANT ASPECT OF THE WORK. WHEN AN ARTIST USES A CONCEPTUAL FORM OF ART, IT MEANS THAT ALL OF THE PLANNING AND DECISIONS ARE MADE BEFOREHAND AND THE EXECUTION IS A PERFUNCTORY AFFAIR. THE IDEA BECOMES A MACHINE THAT MAKES THE ART.

In the tradition of conceptual art<sup>2</sup>, this exeges and the supporting creative and visual material represent my vision. There is no actual finished product, as that requires resources well beyond the scope of this solo endeavour.

You will find mockups, screen designs, interactive storyboards and videos that illustrate the SketchyTruth concept.

I use the term 'Participants' throughout this exegesis. The term is used to refer to prospective or future users of the proposed SketchyTruth prototype, not a cohort of people engaged in user testing.

A prototype is a post-doctoral ambition and at that stage formal user testing will take place. The (calculated) claims I make in this exeges are assumptions in terms of user behaviour. I can only test these claims once I have a working prototype.

In discussing SketchyTruth throughout this exeges I am in fact describing the concept. It is upon this concept that I have formulated my assertions as if I were describing behaviours and responses to the prototype.

This work illustrates a preoccupation with a broad range of theoretical and egalitarian concerns. It has been difficult to limit myself, to draw a circle around

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<sup>&</sup>lt;sup>1</sup> Sol LeWitt (LeWitt 2000).

<sup>&</sup>lt;sup>2</sup> The Tate Gallery, Britain offers a definition of conceptual art. Conceptual art is a term that emerged in the 1960s to describe art in which the idea, and the process of making, take precedence over the finished object. The artwork does not have to take on a finished physical form: it is the idea that counts. By giving primacy to the idea, concepts and thoughts become the artist's medium (*Conceptual Art (via the Internet Archive, Way back machine)*).

my interests and say "I know exactly what I'm going to do", as many discussions and design directions have made evident (Appendix A). I have tried to constrain these explorations to what I confidently feel are the most interesting, relevant and motivating aspects of this project for myself. Some of the themes I explore are as transient as the technologies and trends that drive the Internet and World Wide Web (web), and are as ephemeral as the corresponding techniques for information presentation and interface design.

As you skip through my musings, you will be aware of alternative critical perspectives that are also applicable. As a generalist and web professional, this for me is the natural consequence of dealing with such a broad range of material – every inquisitive turn yields only more questions.

YOU GET INTO TROUBLE WHEN YOU ASK A SINGLE QUESTION WITH A SINGLE BOX FOR AN ANSWER, IN WHICH THAT SINGLE QUESTION ACTUALLY IS MANY QUESTIONS WITH QUITE DIFFERENT MEANINGS, BUT WITH THE SAME WORDS?

The project has not grown from one single preoccupation, but instead it is an aggregation of many ideas and references. Inspired by editorial cartooning which draws meaning out from between the lines in news and current affairs, I have imagined a mechanism for the visual distillation of the news. The concept for SketchyTruth has emerged in the space between the disruptive effects of the Internet and the centralised power of global news media.

This exegesis sets out to describe the landscape from which this project has grown: the inspirations, motivations and challenges. It does so through a variety of overlapping perspectives, 'lenses' though which to view the project. Each of these lenses focuses on ideas that have had significant influence in shaping the project and the epistemological challenges of representation within them.

Rather than preach any grand theory or stand in reaction to particular critical perspectives, this exegesis signposts areas of interest, domains of relevance

<sup>&</sup>lt;sup>3</sup> George Whitesides (Whitesides 2010).

and significant turning points in my reflexive thinking. It is as Kathleen Stewart describes so eloquently in her book Ordinary Affects,

...an experiment, not a judgment. Committed not to demystification and uncovered truths that support a well-known picture of the world but to speculation, ...it tries to provoke (Stewart 2007, p. 1).

Closer to a qualitative investigation, and often openly subjective, this exegesis has acquired an autoethnographical flavour. SketchyTruth as statement makes no claims to the 'truth'—to do so would be hypocritical—instead, it speculates on possibilities, draws attention to what might be questionable and it seeks to promote alternatives. Because it embraces subjectivity it is a thoroughly (post)modern example of remixing, recombining and referencing.

IMMATURE POETS IMITATE; MATURE POETS STEAL; BAD POETS DEFACE WHAT THEY TAKE, AND GOOD POETS MAKE IT INTO SOMETHING BETTER, OR AT LEAST SOMETHING DIFFERENT "

One thing is clear; the Internet is vast. You can find yourself overwhelmed with choice—the process of discovery is not linear—and facing option paralysis from information overload. We are not simply overwhelmed with dubious information; there are volumes of credible and salient information too. It is not possible to draw a circle around the Internet and contain its emergent and disruptive potential. The constant flux and emergent properties of the Internet serve to complicate our need for simplicity further. Making sense of this complexity seems futile, just responding to it probably makes more sense. In writing this exegesis I have subjected myself to a similar paralysing 'information overload' that the SketchyTruth product concept is ironically designed to help alleviate.

WE ARE IN A LINIVERSE WHERE THERE IS MORE AND MORE INFORMATION, AND LESS AND LESS MEANING.5

<sup>5</sup> Jean Baudrillard (Baudrillard 2007, p. 95).

<sup>&</sup>lt;sup>4</sup>T.S. Eliot. (Eliot 1920, p. 114).

While this exegesis traces paths through this complex landscape, it does not claim to be comprehensive, leaving many aspects unexplored out of necessity. I have 'cherry-picked' my way through a theoretical smorgasbord. It is an assemblage of reflective thought pieces, captions to ideas, compilations of concepts and fragments of philosophies drawn together in a montage like the news that we consume. In doing so, I still expect the whole to have meaningful value and be greater than the sum of its constituent parts.



## An identity and production crisis

Am I an artist or designer? This conundrum has challenged me through my entire process.

Designing a web-based interface mostly requires pixel perfect precision and attention to detail. The design outcome serves a practical utilitarian need and most certainly the needs of others beside the designer. Design has a pro-active and problem-solving focus. It is about simplifying, accentuating the desirable, and abandoning the dysfunctional and working toward a clear practical end. Designing is balance between subjectivity and objectivity, between intuition and deduction. Design sits closer to issues of practicality than art.

DESIGNERS ARE INDEED THE MASTERS OF SIMPLIFICATION. THEIR TASK IS TO REDUCE COMPLEXITY IN SUCH A WAY THAT THE USER SURFACE OFFERS US A MEANINGFUL IMAGE, AN IMAGE OF MEANING.<sup>6</sup>

As a professional web interface designer, I am required to be pragmatic. The user-centered designer needs to understand their target users; this is done by directly involving users in the design process. It is participatory, collaborative and experiential. The designer needs to ascertain parameters based on the purpose of the online product, focused on the user around the questions: who, how, when, where and why.

The traditional idea in design that 'form follows function'—originating in architectural design—no longer suffices in online media which is characterised by a non-linear development process. Instead, form and function are intertwined, driven by purpose and forever shifting user needs. The shape of an online product therefore must be able to constantly respond and adapt. "Form now follows the feelings of consumers, and not the function of things" (Bolz 1998) as

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<sup>&</sup>lt;sup>6</sup> Norbert Bolz (Bolz 1998).

users collectively help shape a design through their choices and interactions. The idea of relinquishing control of a design and its interpretation is challenging.

Making art is a self-serving endeavour, intellectually and aesthetically self-stimulating. Art satisfies the artist's desires without the burden of the user needs considered by commercial product designers. For the archetypal artist the personal journey matters most. While an artist naturally seeks to create art that resonates with an audience, there is much less expectation in terms of the control expected by a designer.

It doesn't really matter if the viewer understands the concepts of the artist by seeing the art. Once out of his hand the artist has no control over the way a viewer will perceive the work. Different people will understand the same thing in a different way (LeWitt 2000, p. 14).

An artist has license to 'shout' about the problems in the world without actually providing a solution to the problems. Artists protest, speculate, expose and cogitate; they draw our attention to the symptoms and the causes of phenomena. An artist expresses a worldview. Art rarely provides absolute answers to life's challenges but instead provokes us into asking a lot of questions. Through this process of enquiry, the successful artist—and the vicarious observer—gets closer to an understanding of the subject matter.

WE ALL KNOW THAT ART IS NOT TRUTH. ART IS A LIE THAT MAKES US REALISE TRUTH, AT LEAST THE TRUTH THAT IS GIVEN US TO UNDERSTAND.<sup>7</sup>

This identity struggle between designer and artist is reflected in the development of the SketchyTruth proposal. Is it a tool? Is it a toy? An object for learning or is it just simply art? Art can be a form of visualisation to help make the invisible and subtle aspects of the human condition stand out. Art can also be largely unstructured in its rigour, often only dealing with issues at the conceptual level. Design in its rigourous attention to structure, context and purpose is a way

<sup>&</sup>lt;sup>7</sup> Pablo Picasso (Chipp 1968, p. 264).

of shaping information to draw out salient aspects. Visualisation for the designer is likely to involve constraints and the precision of measurements and numbers.

ARTISTS CAN CREATE PRESENTATIONS OF NATURAL COMPLEX PHENOMENA THAT TRANSCEND TYPICAL SCIENTIFIC VISUALIZATION, EVOKING BOTH A VISUAL UNDERSTANDING AND AN EMOTIVE RESPONSE IN THE VIEWER... ARTISTS ALSO EXPERIMENT AT VARIOUS LEVELS OF ABSTRACTION. ARTISTS WILL OFTEN INVENT INNOVATIVE, POSSIBLY IDIOSYNCRATIC SYSTEMS, WHICH DESCRIBE COMPLEX PHENOMENA.<sup>9</sup>

I have always imagined SketchyTruth as an artwork in order to satisfy my own artistic identity. Yet, I have struggled with questions about practicality and purpose. While seeking the freedom to express my ideas in SketchyTruth as art, I have wrestled with my design tendencies for control and the need to justify its purpose to others. I can only conclude that I am both designer and artist, shifting between the two identities. This duality may help explain inconsistencies in the SketchyTruth proposal as it shifts between a design mindset and artistic license. Similarly, in taking an artist's position—one of protest—it may appear on occasion within the exegesis that I am drawing attention to an issue without the support of a detailed academic investigation.

Working alone also has it drawbacks, particularly in a highly technical field normally used to teamwork. Conceptualising an idea is easier for the solo creative—artistic angst excluded—than the production of a working product. I have never felt satisfied with my vision, regularly updating the creative and conceptual possibilities to reflect the constantly evolving tools, techniques and influences online (Appendix A).

Taking too long to release a product also affects its utility and relevance. The spacious, contemplative aspect to making art conflicts with the speedy production cycle of online media. Watching my ideas fade in terms of originality has challenged my motivation on many occasions. On the Internet ideas evolve and spread quickly, spawning projects based upon similar concepts. Concepts

<sup>&</sup>lt;sup>8</sup> Philip Galanter and Ellen K. Levy (Galanter & Levy 2002).

faddishly reliant upon technological innovations date rapidly as the latest 'killer app' is soon replaced with another.

In traditional hand-drawn character animation—in which I have a little experience—the key to managing such a time consuming art form is to preconceive every frame. The public only sees the finished product. The audience watches, but does not participate in the design.<sup>9</sup>

By contrast, developing web applications and interactive media requires more latitude, more openness to input and change. The process 'invites' errors and responds to the feedback and behaviour of the interactive product's target users. The incomplete beta-release is synonymous with online services. Web applications and online services have become 'living' artefacts that evolve over time. One of the key characteristics of data-driven web 2.0 technologies is that they "get better the more people use them... [and] users must be treated as co-developers" (O'Reilly 2005). The development philosophies behind Web 2.0 have been instrumental in defining the direction of SketchyTruth.

As SketchyTruth continues as a post-doctoral interest and is developed into a working prototype, its ultimate success rests upon the contributions of its user community. As the concept designer, I could never replace the skill set of an entire production team. Building a working prototype requires the kind of skills and resources beyond the scope of this current proposal.

My focus has been on putting 'flesh' on the ideas from a conceptual perspective, while viewing the practicalities of implementation beyond the scope of this current research. SketchyTruth requires significant funding in order to shape it further from an idea into a functional product. The design mockups and simulations are the heart of this proposal, and by necessity, they are also the art.

<sup>&</sup>lt;sup>9</sup> Some big budget commercial productions actually test scenes and edits with audiences, but this is more common with live action films than with animation.

HE REVOLUTIONISED CARTOONING IN AUSTRALIA BY MAKING THE IDEA MORE IMPORTANT THAN THE DRAWING.  $^{10}$ 

SketchyTruth in its current form is a conceptual work, designed to convey a reasonably accurate impression. The supporting creative and visual material has been developed specifically for pitching the idea to potential investors for further development.



<sup>&</sup>lt;sup>10</sup> Cartoonist Bruce Petty described in *40 years of cartoons*, Supplement magazine in the *Weekend Australian* newspaper, 14-15 August 2004. Author unknown.

## A note about the presentation format

Throughout this exegesis I use two formats for quotations; standard inline and block quotes to qualify specific ideas discussed within the main body, and interstitial quotes—comic captions—formatted in a cartoon font within a box.

In the tradition of comic art grammar these comic captions stand for the vocalised speech of characters out of view but within earshot. People with something to say are gathered around the edges of the page you are now reading.

IT IS ALL ABOUT WHAT WE ARE SAYING DIRECTLY TO ONE ANOTHER. THE INDIVIDUAL - EVERY INDIVIDUAL-HAS BECOME A BROADCASTER IN HIS OR HER OWN RIGHT."

> The comic speech bubbles are the static equivalent of 'pop ups' and 'related links' on web pages. They are a visual mechanism to present voices and opinions from an invisible gallery of experts, practitioners and industry commentators, sometimes from sources only available online and unlikely to find a place in traditional scholarly publications any time soon. They relate to the surrounding body text thematically, creating an additional texture and drawing attention to other supporting ideas. The cartoon/comic reference is a way to echo the medium under discussion. While citations in the body follow a Harvard parentheses style, these speech bubbles (and the occasional image) use footnotes. This is a stylistic choice driven by the limited space available, layout treatment and use of a small comic font.

> The Internet and web is a place saturated with the voices of two billion people now online<sup>12</sup> with email and popular social media platforms<sup>13</sup> augmenting

<sup>&</sup>lt;sup>11</sup> Mark Pesce (Pesce 2008a).

<sup>&</sup>lt;sup>12</sup> There is estimated to be 1,966,514,816 Internet users as of June 30, 2010. World Internet Usage Statistics News and World Population Statistics, viewed 17 August 2010, <a href="http://www.Internetworldstats.com/stats.htm">http://www.Internetworldstats.com/stats.htm</a>>.

<sup>&</sup>lt;sup>13</sup> Some of the most popular social media services and platforms include: Facebook, MySpace, Orkut, Twitter, Flickr, Slideshare, LinkedIn, Delicious, Posterous and Tumbler. A simple web search will tell you more about these services.

much of the conversation. I use these comic captions to echo this conversation, allowing a small fraction of those people to 'have their say' within the static medium of print. Similarly, the occasional Twitter screenshot is designed to echo the participatory, transient nature of social media.

I have placed images within the text flow in order to maintain an immediate context and proximity to the main body text. Flipping to separate pages of figures would be too disruptive to the continuity of the ideas under discussion. As I argue throughout this exegesis, images are at times more significant than the words they replace. Since this is not a traditional work, I do not see how I could have separated images and text without losing the contextual dependencies. Some of the images I use are 'visual quotes', like the cartoon panels of Scott McCloud. In some cases, separating imagery from textual context seems as unnatural—and meaningless—as a cartoon or comic where the image and accompanying text have been divorced from each other. Meaning is made when image and text sit together.



## About the title



The title of this exegesis; *SketchyTruth:* Somewhere in between the good news and the bad news lies the truth, describes a range of ideas.

SketchyTruth is the name of the application concept for smartphone and tablet devices (smart-devices).

SketchyTruth is also the basis for my critical reflections, examining the sketchy, incomplete and sometimes misleading nature of news reporting. The adage "Do we believe what we see, or do we see what we believe" encapsulates the slippery nature of truth and perception. How do we know what is true in the news? Outside of placing our trust in the authority of the news providers, there is often little separating fact from fiction for the news consumer.

SketchyTruth refers to a process of drawing and exploring information visually in order to reveal hidden connections, 'joining the dots' and making the invisible, visible. Sketches are "small, rapidly executed drawings made for pleasure and practice" ('Grove Art Online, Sketch', 2010) they simplify or help explain concepts by focusing on—amplifying—key features, they give visual form to our thoughts.

> Sketching allows people to visually represent ideas quickly... A sketch is not a contract: it is a proposal that can be modified, erased, built upon... Sketching allows people to give form to notions that are otherwise imaginary; the act of seeing fuels the process of reasoning... quickly made depictions that facilitate visual thinking. (Johnson et al. 2009, pp. 1-2)

The title alludes to approximations of the truth in much the same way a sketch drawn hastily on a napkin only provides enough conceptual cues to

<sup>&</sup>lt;sup>14</sup> An expression I have heard many times, but for which I have been unable to determine the source.

adequately 'get the picture'. Headline news is a montage of 'sketches' or quick functional information bites that leave detailed contexts and back-stories out. News is contextual; it is transient and can be subject to bias and manipulation. As a result, the news on occasion engenders an air of uncertainty or distrust because of 'sketchy' details.

The subtitle somewhere in between the good news and the bad news lies the truth is a word play. It refers to the uncertainty G000 of locating the truth in the news media spectrum between good and bad news. It also refers to lies disguised as truth in the media; the untruths, the deceptions both knowing and unknowing.

THE NEWS SEEMS TO CONSIST SOLELY OF FINANCIAL APOCALYPSE, CELEBRITY ILLNESS, TERRORISM, AND SPREE KILLINGS... 'IF IT BLEEDS, IT LEADS'... BAD NEWS WINS."

> Good news and bad news are subjective terms about the relative affective qualities of news information. 'Good' news is credible, well made news. It is produced within the framework of a professional journalist code. 'Bad' news by contrast is sloppy, poorly researched, sensationalist and often driven by public relations and profit. SketchyTruth argues in favour of a visual news information format that sits somewhere between these extremes – openly subjective and genuine, opinionated but honest, and credible.



<sup>&</sup>lt;sup>15</sup> Charlie Brooker (Brooker 2009).

# What is SketchyTruth?

SketchyTruth is currently a proposal, a mockup and development pitch for a cartooning application on smartphones and tablet computers to leverage the power of distributed knowledge and aggregation, and to provide an interpretation of news and events outside of mainstream media. It is a conceptual platform that aims to create a provocative visual impression—a 'visualisation'—using the drawn, manipulated and annotated image as a form of metadata to the news. It is a form of mass collaboration and distributed thinking applied to news content to scrutinize the facts. While social applications like Twitter utilise text as the basic unit of communication, SketchyTruth promises to harness the communicative potential of cartoon<sup>16</sup>. Concepts of citizen journalism and social media are recast into a visual alternative – 'Citizen Cartooning'.

The SketchyTruth mockup comes in five formats included on the CD-ROM that accompanies this exegesis:

- Apple Keynote slide presentation 5.5mb (interactive storyboard)
- Apple Quicktime video 12.7mb .mov, best viewed with the Apple Quicktime video player (interactive storyboard)
- MPEG-4 video 22mb and 69mb .mp4 (video simulation of SketchyTruth being used)
- HTML (interactive storyboard best viewed in the Safari web browser)
- PDF 7.1mb (storyboard, static frames only)

These files illustrate the SketchyTruth concept. They are not intended to describe in full technical detail how the application will be built, but instead describe the interface and user-experience. This is the first stage of development toward what would otherwise be a complex team-based project.

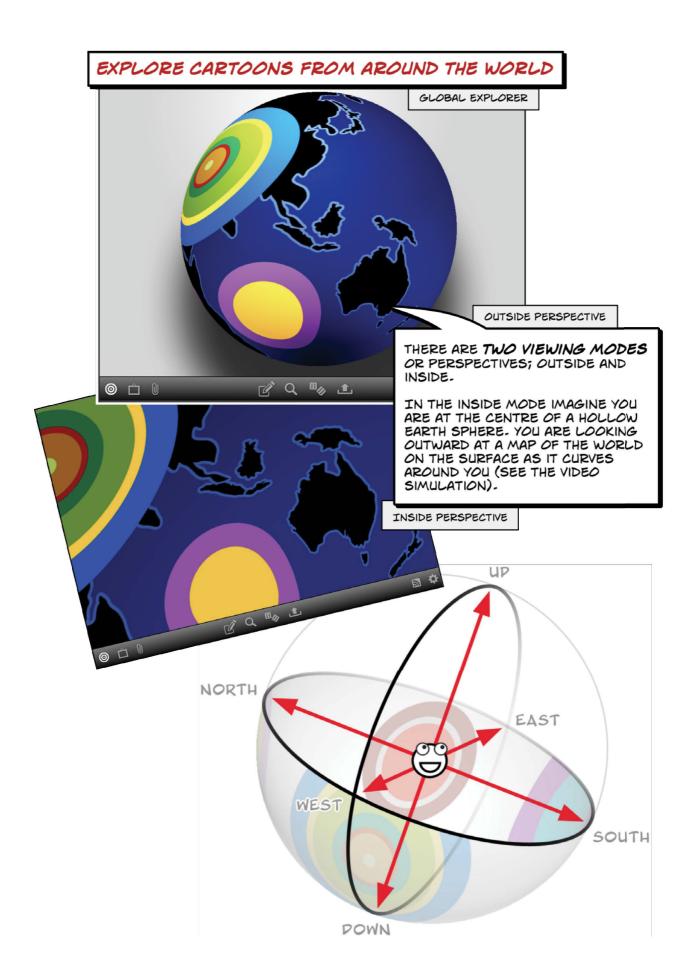
1

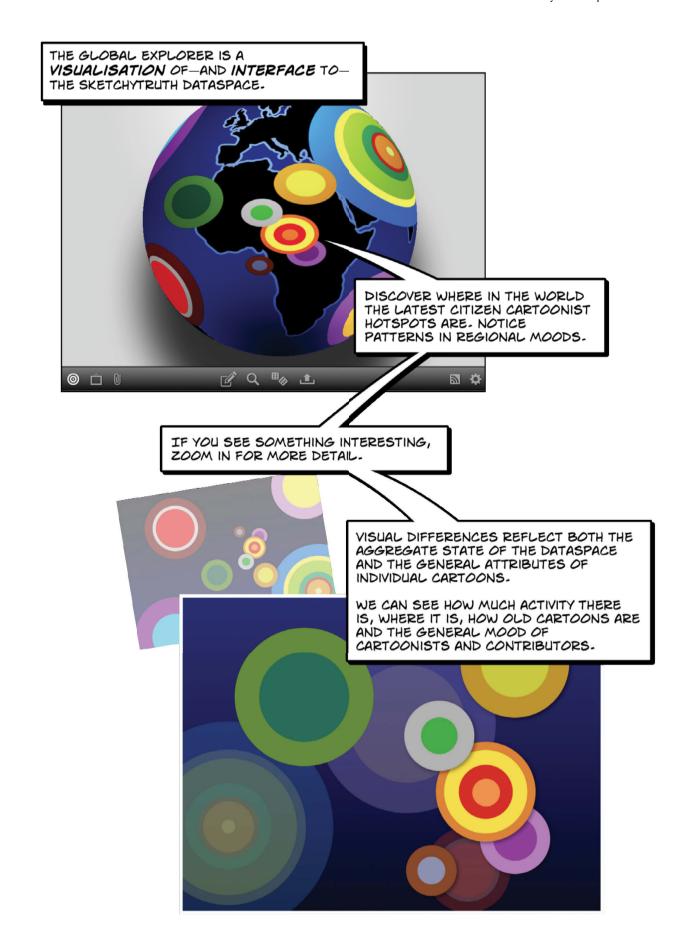
<sup>&</sup>lt;sup>16</sup> Cartoon is a term that has a variety of meanings, some of which are explored in more detail in a later section. It can be simply defined as a crafted combination of image and/or text with a message, intentionally arranged in such a way as to provide social commentary, often through satire, symbols, caricature and metaphor.

Animated interface builds and transitions are an important part of communicating the proposed user-experience. These transitions are not available in the PDF document or in the HTML version (except when viewed in the Safari web browser).



Exploring the SketchyTruth cartoon dataspace will be done initially through a visualisation, where cartoons aggregate in colour coded rings and clusters. An individual cartoon only comes into view when the user zooms in to activate a particular ring. These ideas are explained in more detail in the following graphic pages.





### INTERPRETING THE CARTOON DATASPACE VISUALISATION ...

THERE ARE SIX VARIABLES REPRESENTED IN THE GLOBAL EXPLORER.

EACH OF THESE ARE VISUAL INDICATORS OF A VARIETY OF CARTOON ATTRIBUTES.

### TERMINOLOGY

THE FIRST CARTOON ABOUT A SUBJECT IS AT THE CENTRE AND CALLED THE SEED CARTOON.

A SET IS A GROUP OF CARTOONS ABOUT THE SAME SUBJECT. VISUALLY THIS A SET OF CONCENTRIC CIRCLES OR RINGS.

#### 1. NUMBER OF RINGS

POPULARITY OF A TOPIC (TOTAL NUMBER OF UNIQUE DRAWN CONTRIBUTIONS OR MODIFICATIONS ADDED TO THE ORIGINAL CARTOON). THE OUTERMOST RING IS THE MOST RECENT ADDITION OR MODIFICATION TO A TOPIC.

### Z. COLOUR

AGGREGATE MOOD (EMOTIONAL RATING OF A CARTOONIST AND CONTRIBUTORS) AND INSTENSITY OF A MOOD.

#### 3. BRIGHTNESS/SATURATION

RELATES TO THE AGE OF A SET OVER LONG TIME PERIODS. RECENTLY EDITED SETS ARE BRIGHTER, OLDER SETS ARE MORE FADED OVER ONE YEAR.

#### 4. STACKING ORDER

THIS IS A SHORTER TIME VARIABLE TO SEPARATE CURRENT ACTIVITY. SETS WITH THE MOST RECENT ADDITION FLOAT ON TOP OF OLDER SETS, LIKE A STACK OF CARDS.

#### 5. RING THICKNESS

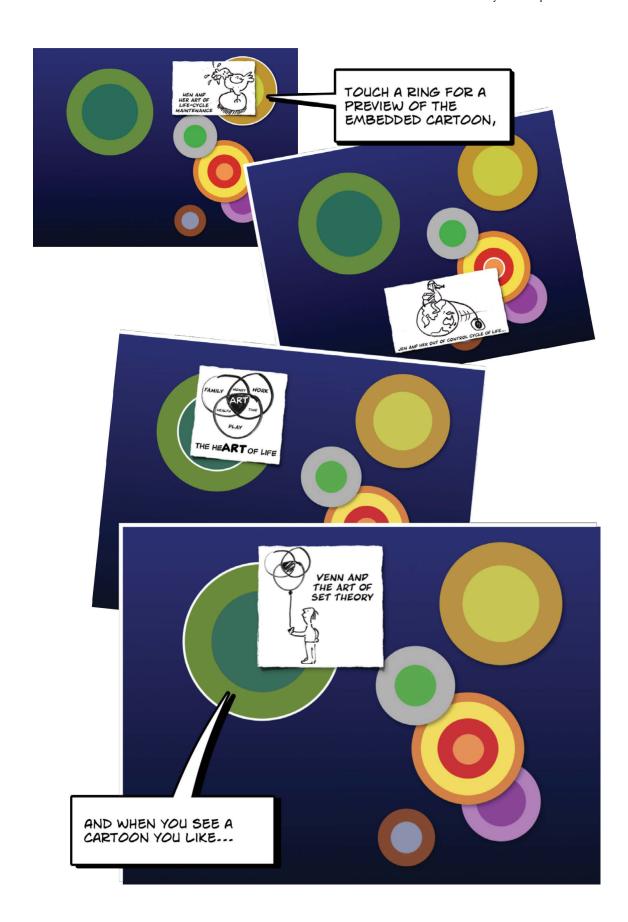
INDICATES POPULARITY OF A PARTICULAR CARTOON, OR AMOUNT OF COMMUNITY INTEREST BASED ON A TOTAL OF ALL RATINGS, TAGS AND COMMENTS. THICKER RINGS ARE CARTOONS WITH HIGH LEVELS OF INTEREST.

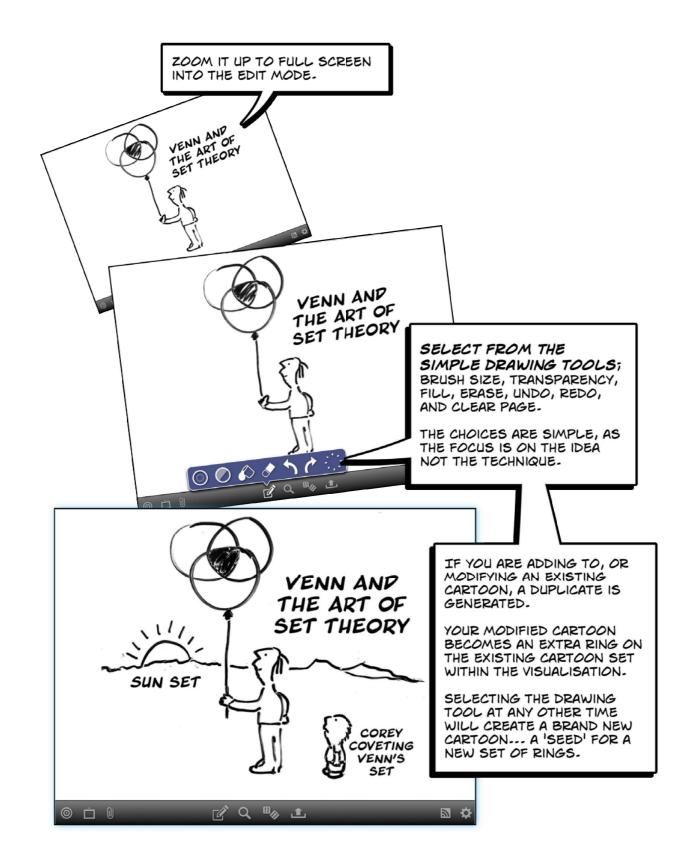
#### 6- LOCATION

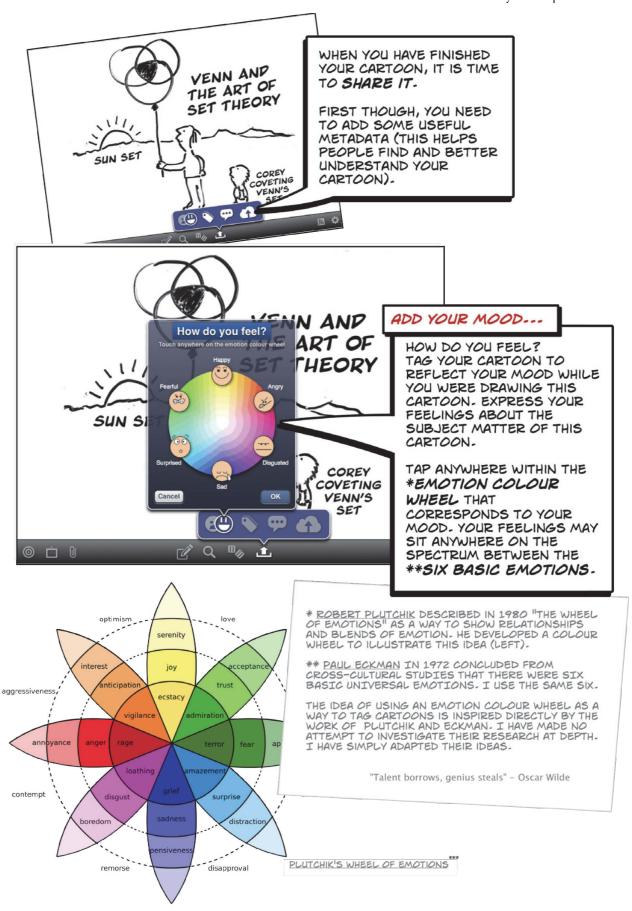
DETERMINED BY GPS OR NETWORK POSITIONING IN A CARTOONIST'S MOBILE DEVICE, A TAG MATCHING A PLACE NAME, OR OTHER CARTOONS WITH SIMILAR ATTRIBUTES.

*CLUSTERS* ARE SETS OF CARTOONS IN CLOSE PROXIMITY TO OTHER SETS BECAUSE OF SIMILARITIES USUALLY ASSOCIATED WITH A WORLD REGION.

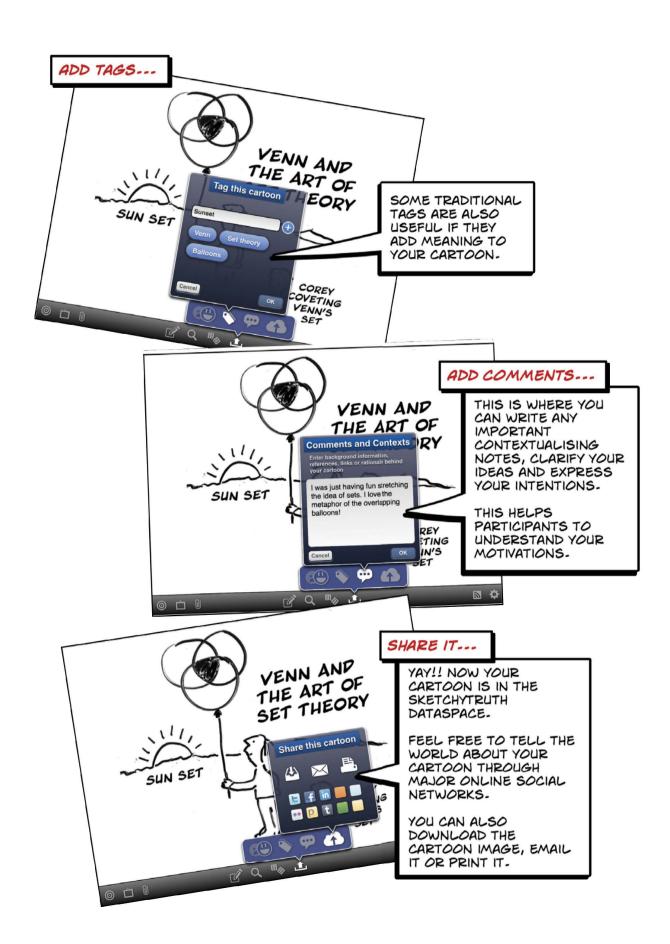
CLUSTERS FORM AS A RESULT OF CONNECTIONS BETWEEN THE ATTRIBUTES OF CARTOONS; PRIMARILY LOCATION AND TAGS (TOPICS AND THEMES).

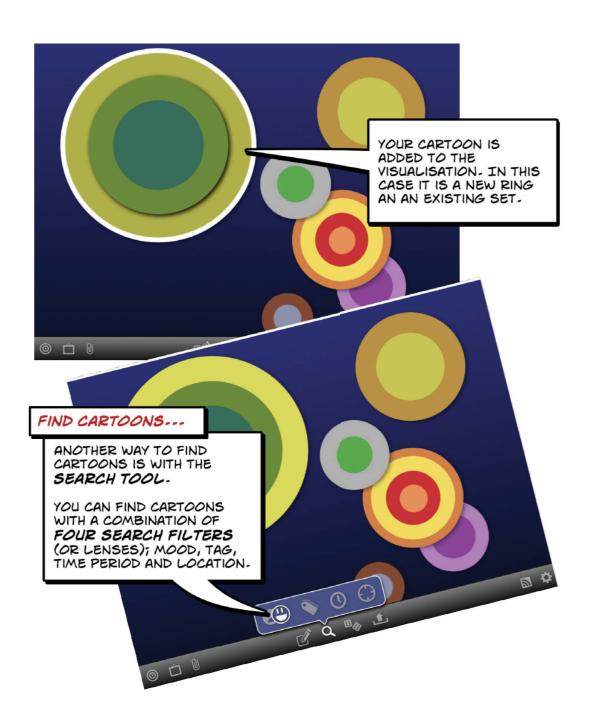


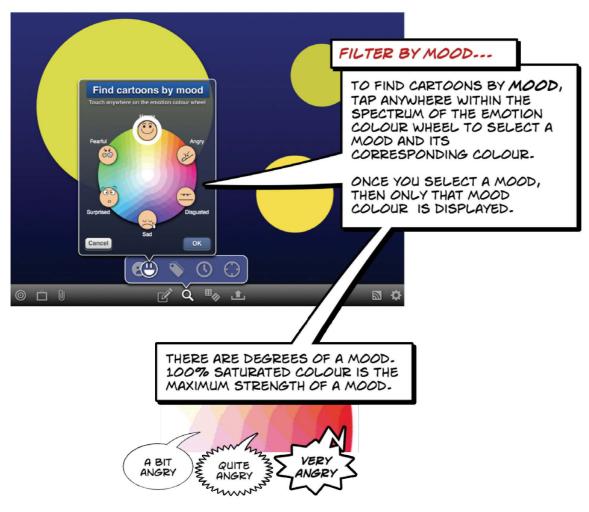




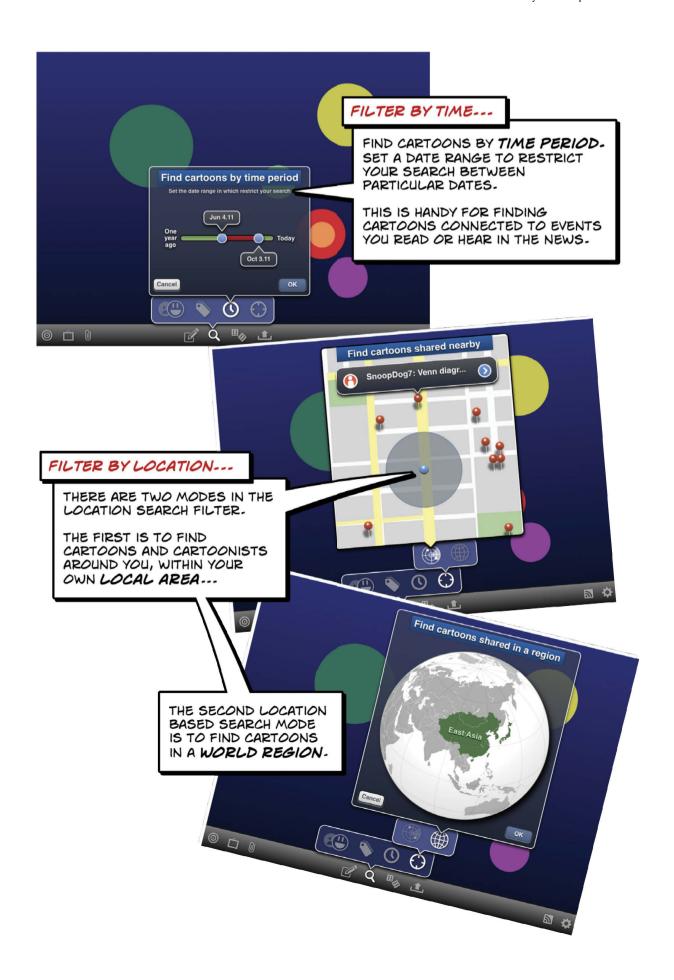
- \* (Plutchik 2001)
- \*\* (Wikipedia 2006b)
- \*\*\* (Wikipedia 2011a)



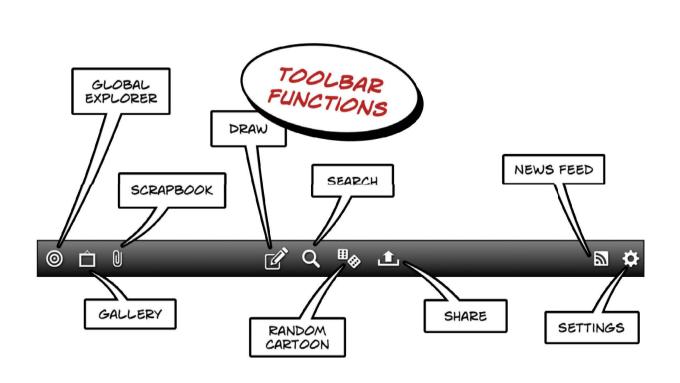












The vision for SketchyTruth is a news information environment that is not driven by the values sold to us by the news media establishment—'breaking news', speed and urgency and authoritative truth—but is driven instead by an openly subjective, long-term iterative and socio-collaborative process. A newspaper cartoonist does not report the news, but instead provides an opinion after the fact. Similarly, a participant in SketchyTruth explores the meaning in the news only after it is has been reported.

SketchyTruth is imagined as a digital drawing pad for our collective affective response to the news. It aggregates cartoons around news topics to form "miniature theatres of information" (Tufte 1997, p.138), with related contributions clustering into detailed multi-layered narratives known as visual confections (Tufte 1997, p. 121). Participants will sketch, draw and cartoon how they feel about the news—in protest or support—weaving crowdsourced (Howe 2006) narratives around topics.

ALL OF THIS MEANS THAT EVERY TIME WE GATHER TOGETHER IN OUR HYPER-CONNECTED MOBS TO CROWDSOURCE SOME PARTICULAR TASK, WE BECOME BETTER INFORMED, WE BECOME MORE POWERFUL ... CROWDSOURCED KNOWLEDGE REQUIRES A MOB, BUT THAT KNOWLEDGE, ONCE IT HAS BEEN COLLECTED, CAN BE SHARED WITHIN A COMMUNITY, TO HYPER-EMPOWER THAT COMMUNITY.17

> Hand-drawn reactions to the news and reflections upon the news become part of an endless, expanding canvas of opinion. Each cartoon functions as a visual annotation to the news with the cartoons in SketchyTruth acting as visual meta-tags for a complex world, under reported or over simplified in mainstream news reporting. In a recursive twist the cartoons can be further classified by attaching yet another layer of tags through collaborative social filtering to visually or textually modify and create potent bundles of meaning where metadata is layered upon metadata. The aggregation of collective opinion that amasses around individual cartoons gives them the relative importance to 'stand out from

<sup>&</sup>lt;sup>17</sup> Mark Pesce (Pesce 2008b).

the crowd' like the most frequently occurring items in a tag cloud<sup>18</sup> – bigger, brighter and attracting attention. Leveraging "collective intelligence" (Levy 1997, p. 13) to visually examine issues in the news then becomes another means for better understanding. The visual terrain becomes a stream of "total news consciousness" (Ryan 2006) and another way of reading the news, well after the headlines have faded.

SketchyTruth is not a newsreader; it is an endless contemplation upon the news and its effects. It does not attempt to replicate the news, but instead filters and reflects it. It is not concerned with the speed of 'breaking news' and it certainly does not claim to be objective. Instead, it will invite participants to act as human news filters, reassessing news content from their own perspective to add ongoing social value to the 'stuff' in and of the news. It celebrates diversity of opinion while taking inspiration from the tradition of news editorial cartooning and citizen journalism.

WHEN THE PEOPLE FORMERLY KNOWN AS THE AUDIENCE EMPLOY THE PRESS TOOLS THEY HAVE IN THEIR POSSESSION TO INFORM MANY OTHERS OF A NEWSWORTHY EVENT, THAT'S CITIZEN JOURNALISM.19

Citizen journalism (participatory journalism) is succinctly described as:

The act of a citizen, or group of citizens, playing an active role in the process of collecting, reporting, analyzing and disseminating news and information. The intent of this participation is to provide independent, reliable, accurate, wideranging and relevant information that a democracy requires (Bowman & Willis 2003).

SketchyTruth focuses on the idea of distributed visual news analysis, while looking to reveal hidden 'truths' by harnessing the collective wisdom of a social network. In this network, participants contribute and share their responses to mainstream broadcast news or the locally relevant newsworthy events in their

<sup>&</sup>lt;sup>18</sup> Tag clouds are a visually weighted list of key words or labels linked to web objects; text, images, sound. The most frequently used tags are more noticeable, indicating a greater number of linked objects.

<sup>&</sup>lt;sup>19</sup> Jay Rosen (Jay 2008).

own lives. While no single perspective necessarily represents the total truth, the aggregated opinion and analysis can make an issue more balanced in its representation. Over time, narratives grow around news topics. They are shaped into the most accurate picture a community can make based on the available information and the kind of common sense 'guesswork' popularised by James Surowiecki in The Wisdom of Crowds (Surowiecki & ebrary Inc. 2004). SketchyTruth attempts to draw together news fragments that occur over long periods into something with meaningful continuity similar to Google's Living Stories project.<sup>20</sup>

Focused on the notion of "amplification through simplification" (McCloud 1993, p. 30), SketchyTruth draws upon ideas in comics, newspaper cartoons, mapping, knowledge visualisation and visual thinking. I believe a visual device like a cartoon can be used as a form of compression for complex ideas in an online environment where bandwidth and attention is limited – a useful way to manage news and media information overload. If we ask "what kind of images are appropriate for the needs of a global informational networked society?" (Manovich 2004), then perhaps cartoons provide the clues and answer to that question.

JUST AS WE NOW TRY TO CONTROL ATOM-BOMB FALLOUT, SO WE WILL ONE DAY TRY TO CONTROL MEDIA FALLOUT.2

> SketchyTruth attempts to map the affective qualities of the news visually, through a process of collective cartography, where the landscape of cartoons is navigable like Google map. SketchyTruth is to cartoons, as Flickr<sup>22</sup> is to photographs – a place to show, share and collaborate. In a process of classification and aggregation, participants will link, tag, comment, copy and

<sup>20</sup> The Living stories prototype is where "complete coverage of an on-going story is gathered together and prioritized on one URL." Current, past and related news information is drawn together into one time-based format so that the entire historical development of a story can be navigated. It is an attempt to display the entire context and therefore provide a deeper understanding of issues in the news (Living Stories 2010).

Marshall McLuhan (McLuhan 1964, p. 305).

<sup>&</sup>lt;sup>22</sup> A social photography website, "Flickr is the best way to store, sort, search and share your photos online. Flickr helps you organize that huge mass of photos you have and offers a way for you and your friends and family to tell stories about them." Viewed 5 September 2010, <a href="http://www.flickr.com/help/general/#1">http://www.flickr.com/help/general/#1</a>.

refine each other's cartoons. Over time, a layer of metadata accretes to cartoons that resonate with participants in the SketchyTruth space, adding further perhaps alternative—meanings.



TIME magazine cover celebrating online user generated content (Grossman 2006; Wikipedia 2009).<sup>23</sup>

SketchyTruth is about drawing on experience. It is about showing how we feel about the events and the things that affect us, individually and communally. It is about mapping out our affective response to the kind of information that comes mediated through the broadcast news and in the process, critiquing, filtering, aggregating and perhaps even amplifying that meaning for others. SketchyTruth puts you—the cartoonist—at the centre of the news information space.

SketchyTruth is my protest and challenge to the news media, provoked by how commercial news in particular can disregard principles of impartiality, accuracy and relevance in favour of profit and convenience—issues I explore in the section The news is broken. The project represents an egalitarian mission to sensitise the participant to deceptive news in an age of media saturation and information

<sup>&</sup>lt;sup>23</sup> User generated content (UGC) typically refers to online media curated or edited by the general public. The TIME cover acknowledges the online phenomenon of "community and collaboration."

overload. I have set out to design a platform for socially networked smart-device users to playfully and creatively examine news information through cartooning, in attempt to read between the headlines.

In my desire to make a statement from an artist's perspective, I did not start out with a clear objective or 'question' for this exploration. Instead, I have felt morally obliged to react to, and to respond to what I observe occurring with news media. SketchyTruth is an assertion about the state of news media and an artist's impression of an alternative mechanism for consuming the news. It is also my opinion; one that I hope has enough validity to provoke more of us to consume our news with healthy skepticism.

Mark Dery explores the subversive aspect of projects like SketchyTruth in his essay on *Culture Jamming*, in which he describes the act of "media hacking," information warfare, terror-art, and guerrilla semiotics",

> It is this yearning for meaning and cohesion that lies at the heart of the jammer's attempts to reassemble the fragments of our world into something more profound.... [they] remind us that numberless stories go untold in the daily papers and the evening news, that what is not reported speaks louder than what is. The jammer insists on choice: not the dizzying proliferation of consumer options, in which a polyphony of brand names conceals the essential monophony of the advertiser's song, but a true plurality, in which the univocal world view promulgated by corporate media yields to a multivocal, polyvalent one (Dery 1993).

This is a rallying call to simplify, amplify, dissect and visualise the news. As the SketchTruth subtitle attests, somewhere in between the good news and the bad news lies the truth.



#### What is a cartoon in SketchyTruth?

#### A rough sketch

This exegesis is not a detailed examination of the history of cartoons and cartooning, and neither is it a technical manual. While the art and discipline of cartooning could alone be the subject of a lengthy examination, it is beyond the scope and intent of this exegesis. My objective here is to draw attention only to those ideas I have focused upon in developing the creative proposal for SketchyTruth.

LINLIKE A NEWS ARTICLE OR COLLIMN, THE CARTOON HAS THE CAPACITY TO ALMOST INSTANTANEOUSLY DISSECT A POLITICAL ISSUE. [A CARTOON] CAN OFTEN HAVE MORE VERACITY AND INSIGHT THAN HUNDREDS OF WORDS OF TEXT-BASED ANALYSIS.<sup>24</sup>

Inspiration for SketchyTruth has roots in my exposure to the cartoonist Bruce Petty and my admiration of his work. It seems reasonable in this context to bias Petty throughout this exegesis—at the expense of other equally accomplished cartoonists—because doing so best illustrates the directions outlined in my creative proposal.

Petty's cartoons—for me—epitomise the communicative strengths of the cartoon form and superficially resemble the kind of drawing style I would like to see—perhaps naively—flourish in the SketchyTruth dataspace.

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<sup>&</sup>lt;sup>24</sup> Guy Hanson (Guy 2009).



The rough and sketchy style of Bruce Petty would suit mobile touchscreen input - Down to earth (Petty 1983).

Petty's cartoons have a distinctive rough and 'sketchy' feel – a trademark style that belies over fifty years of experience by one of Australia's oldest working professional editorial cartoonists (at the time of writing this exegesis). While Petty makes it 'look' easy, I acknowledge that for most of us drawing our opinion may seem more challenging than simply writing it. I am gambling that SketchyTruth will be compelling enough to dissolve most basic drawing fears.

BRUCE PETTY'S CARTOONS HAVE BEEN DESCRIBED AS "DOODLE-BOMBS"... AS THE VICTORY DANCE OF A FLY ESCAPED FROM THE INK POT.<sup>25</sup>

A formal understanding of cartoons is not a prerequisite and there are no restrictions on drawing ability to participate. Editorial cartooning is merely a reference point, not a performance expectation. Sketchy Truth when realised will continue to be an ongoing experiment in visual literacy.

Look up the term cartoon and it becomes clear that the word has meaning and origins somewhat different to current usage:

> a full-size drawing used by an artist to transfer a design to a large, finished work. The most frequent use of a cartoon was in Fresco painting, particularly in the Renaissance ('The Concise Oxford Dictionary of Art Terms, Cartoon').

<sup>&</sup>lt;sup>25</sup> Phillip Adams (Adams, Leak & Spooner 2009).

Cartoon can be simply defined as a combination of image and/or text with a message, intentionally arranged in such a way as to provide social commentary, often through satire, symbols, caricature and metaphor. Cartoons, not restricted by medium or technique, can be any combination of manipulated photos, icons, visual symbols, sketches, and drawings. The term 'cartoon' can be,

> applied to mean all forms of still or moving, single or multiframed images presented in print or other media, that provide symbolic visual representations (Bamford & François 2001, p. 5).

Broad definitions like this describe the anticipated range of contributions SketchyTruth will display from participating 'Citizen cartoonists'. The only desirable criteria for prospective users of SketchyTruth, is an ability to create marks that have meaning visually and relate to events in the world.

Visual-textual puns through cartooning can create multiple meanings and evoke complex ideas within what appears to be just a drawing. An important distinguishing factor for a cartoon is the use of shared cultural knowledge, symbols and metaphor. Editorial cartoons deal with politics and social commentary, and naturally with the topical issues in current affairs and news. While the editorial cartoon can make us laugh, the memorable ones also make us think.

CARTOONS ARE AN AMALGAM OF IMAGES (SYMBOLS), CAPTIONS (WRITTEN WORDS), AND SOCIAL COMMENTARY (SPOKEN AND LINSPOKEN WORDS).20

<sup>&</sup>lt;sup>26</sup> Alec R Hosterman (Hosterman 2007).



Visual puns rely on current contexts and events for their meaning, like this wartime newspaper cartoon.<sup>27</sup>

Cartoons encode—compress, abstract and simplify—information using visual-textual cues to trigger a cascade of associations in the viewer, often to humorous effect. The communication relies upon symbolic or metaphorical elements embodied in the cartoon, not just superficial detail. This makes the cartoon a subjective medium. The way a face is exaggerated in a caricature, the props included in a scene, the symbols, incongruities, contrasts, omissions, context, cultural references and timeliness; these all contribute to the construction of meaning. Relying though on what is largely a visual means of communication carries risks in terms of cultural irrelevance, timing, misunderstanding, and offence<sup>28</sup>.

Examining cartoons from the perspective of visual literacy, cartoons can be useful tools for communication in educational and training contexts,

> Cartoons serve to focus attention and provide a medium for forming identities and framing experiences. Cartoons combine symbolic words and pictures in an integrated way to convey

<sup>28</sup> A well known example of cartoons backfiring was when twelve editorial cartoons depicting the Islamic prophet Muhammad, were published in the Danish newspaper Jyllands-Posten 30 September 2005. This was seen a deeply insulting by some Muslim communities across the world, despite the publishers attempts to justify the cartoons. The controversy escalated into protests and violence.

<sup>&</sup>lt;sup>27</sup> Theodor Seuss Geisel a.k.a. Dr Seuss, *The Tail of the Boxing Kangaroo*, January 27, 1942, (Seuss 1942).

narrative, ideas or thoughts. Cartoons bridge the space between the visual and textual existence of a thing and the realm of ideas.

...From a purely semiotic point of view, cartoons constitute a highly sophisticated form of communication. Through the combination of text and visual, cartoons are capable of expressing innermost needs and ideas. The process of closure forms a link in cartooned images, allowing the artist to show parts, but the 'reader' to perceive wholes. In this way cartoons act in a balancing act between the visible and the invisible. The reader or viewer is a conscious collaborator in the process of making meaning (Bamford & François 2001, p. 5).

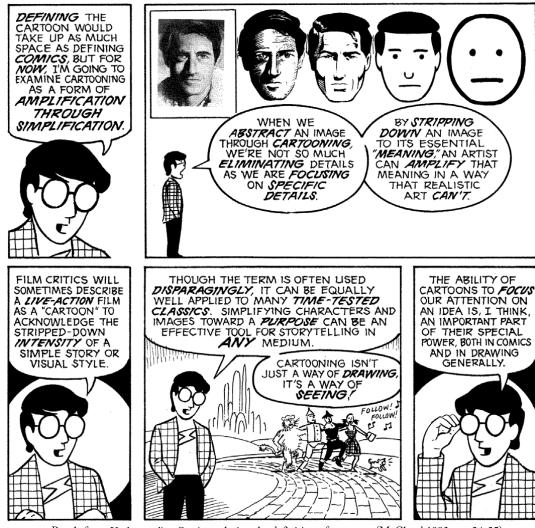
Beyond the visual qualities of cartoons, the underlying mechanics help make cartoons successful communication tools. For Scott McCloud (1993) the process of reduction central to the cartoon medium is the compression of complex ideas and the amplification of meaning through exaggeration, abstraction and simplification. The ideas put forward by McCloud are foundational to my interests in SketchyTruth. His ideas on the mechanics of cartoons, graphic simplicity and visual communication unexpectedly garnered the attention of computer information, interaction and interface design professionals (Manning 1998) who saw his ideas informing computer-user interface design.

> The trick in either comics or animation is to embody your ideas rather than sugarcoat them; to make plain, through images, the patterns and concepts you see clearly in your head, secure in the knowledge that even the most byzantine, advanced, jargon-laced topic probably rests on a few fat visual metaphors almost anyone can grok<sup>29</sup> with a little explanation (McCloud 2010).

The visual language of comics according to McCloud, have an inherent and powerful ability to communicate the subtleties of a complex world in an engaging, universal way:

<sup>&</sup>lt;sup>29</sup> Grok: verb to understand deeply or intuitively; to establish rapport; to enjoy ("grok". Oxford Dictionaries. April 2010).

One of the most important things about comics I discovered, was that comics are [not only] a visual medium but that they try to embrace all the senses within it... [and] us with a window back into the world we live in. And when media evolve so that the identity of the media becomes increasingly unique... you are providing people with multiple ways of re-entering the world through different windows, and when you do that it allows them to try to triangulate the world they live in and see its shape (2005).



Panels from Understanding Comics exploring the definition of a cartoon (McCloud 1993, pp. 24-25).





THE SOUL NEVER THINKS WITHOUT A MENTAL IMAGE.30

I believe that there is latent communicative power in the art of cartooning that is yet to be fully realised in digital interactive media. The ability of cartoons to encode and convey information makes an effective vehicle for online social news analysis. In this regard, the ideas of Scott McCloud (1993), the principles of visual representation and information design described by Edward Tufte (1990, 1997, 2001, 2006) and the illustrative work and satirical cartoons of Australian cartoonist Bruce Petty, have proven inspirational.

To sketch a reaction to the news like a newspaper cartoonist requires reflection, analysis and cognitive effort in drawing upon the news for inspiration. Humour is optional, but helps. The very act of deciding what to draw; what is interesting enough, moving enough or important enough to draw, is an essential component of this news filtering process. A successful news cartoon simplifies socio-political issues down to the most important ideas. It is about highlighting the contrasts, often using metaphor to explain complex or controversial ideas and drawing attention to the important differences.

Tufte (1990, p. 65) saw in terms of visual and graphic displays that "Information consists of differences that make a difference" (Bateson 1979, pp. 68, 9), that what stands out enhances and clarifies—not confuses—our understanding. Tufte later describes the essence of information design in his chapter titled The Smallest Effective Difference as "what can be done with fewer is done in vain with more" (1997, p. 73). Tufte's message like McCloud's (1993, p. 30) is one about simplicity and efficacy in communicating a message.



<sup>&</sup>lt;sup>30</sup> Aristotle (Roeckelein 2004, p. 146).

# Cartoon metaphor

George Lakoff summarises the nature of metaphor as "the main mechanism through which we comprehend abstract concepts and perform abstract reasoning". For Lakoff:

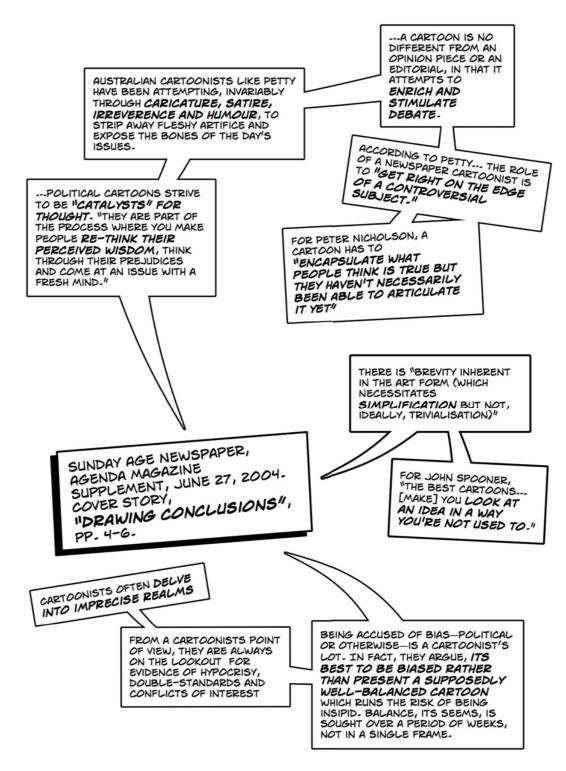
> "Much subject matter, from the most mundane to the most abstruse scientific theories, can only be comprehended via metaphor" (Ortony 1979 p. 244).

In SketchyTruth, the magic of metaphor and visual association collide with news content. Cartoons as vehicles to encode deeply complex and deeply felt issues helps us to see ideas beyond words and visualise concepts worth more examination, consideration and expression than offered by the short headlines and info-bites that we commonly receive as news.

The use of cartoon styled presentations to persuade, influence and help explain complex subjects and slippery concepts has evolved into a small industry.<sup>31</sup> Visual metaphor in particular helps furnish our imagination with the necessary symbolic tools (imagery) to help decode abstractions, acting as a crutch to support our thinking. For the cartoonist, metaphor is key to saying what they think:

> The Age's Bruce Petty aims to provoke people 'into thinking again about an issue' by 'using a metaphor, we can say things a journalist can't say' (Miller, P. 2002 in Manning & Phiddian 2004b, p. 26).

There are a many examples: Commoncraft <a href="http://www.commoncraft.com/">http://www.commoncraft.com/</a>> which produces "three-minute videos help educators and influencers introduce complex subjects." Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA) <a href="http://comment.rsablogs.org.uk/videos/">http://comment.rsablogs.org.uk/videos/</a>, and Xplane "the visual thinking company" <a href="http://www.xplane.com/>.">.



An insight into cartooning the news: Drawing conclusions aggregates and summarises the thoughts and opinions from cartoonists working for the Age newspaper (Anon 2004, pp. 4-6).

You may have heard, or use the expression "I see what you mean", or "I see" in everyday conversation. When we describe relatively complex things, the mental pictures precede the words in our 'minds eye'. When words are too abstract we resort to these mental 'word pictures'.

DRAWING CAN BE USED TO RECORD WHAT YOU SEE EITHER IN REALITY OR IN YOUR MIND'S EYE, IN A MANNER NOT TOTALLY UNLIKE THE WAY WE CAN RECORD OUR THOUGHTS AND IDEAS IN WORD.32



<sup>&</sup>lt;sup>32</sup>Brian Bomeisler (Bomeisler 2011).

#### Cartoon cartography

Cartoon and cartography share similar characteristics. Both domains involve a radical simplification, abstraction and often exaggeration of information in order to focus our attention on an idea, or to facilitate a task. Like cartoons; "Maps Exaggerate, Fantasize, and Carry Messages, Aesthetic, Political, Spiritual, and Humorous" (Tversky 2000, p. 75).

My objective is to create a database of news cartoons, a source of both ideas and opinion on global current affairs, a visualisation and map of the news in the most playful sense. While SketchyTruth can be considered a map, I aim to intentionally relieve myself of the responsibility of being 'cartographer'. The participants will instead become the mapmakers, sharing a collective responsibility for the organisational schema and representation. In this way SketchyTruth sets out to explore Fredric Jameson's post-modern territory of "new political art" (Jameson, Hardt & Weeks 2000, p. 232) primed with smart mobile technologies and the Internet. The participating cartoonist is also cartographer, remixing news information and making it personal and meaningful.

What then might constitute a truthful map or 'picture' of news if such a system evolves from the relative, contextual and personal? When the media and the power structures themselves already filter the information one might use to illustrate the news, this raises questions regarding the credibility of any such representation. The act of committing to a personal view of world affairs and producing a map of that viewpoint is a subjective exercise open to as much uncertainty as 'truth in the news'. Maps inherently represent the interests of the mapmaker. Instead of asking ourselves if there is such thing as an unbiased

map—when bias is a natural consequence of making a map—we should perhaps ask instead, does it matter?

If we agree that all maps are biased, then perhaps a map-making process that aggregates the wisdom of the crowd (Surowiecki & ebrary Inc. 2004) is the most democratic and possibly the 'truest' view of the world. In this kind of mapmaking the individual is distanced from determining organisational schema, which is instead the product of an emergent, self-organising and regulating, distributed and participatory mechanism. In the vein of the open knowledge movement<sup>33</sup> the Wikipedia equivalent of online maps—the Open Street Map strives for these very goals by publishing maps "created by people like you" (OpenStreetMap – The Free Wiki World Map).

This view of map-making is worthy of artistic experimentation, as suggested by Deleuze and Guattari in A Thousand Plateaus:

> The map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification. It can be torn, reversed, adapted to any kind of mounting, reworked by an individual, group or social formation. It can be drawn on a wall, conceived of as a work of art, constructed as a political action or as a meditation. (Deleuze & Guattari 1987 pp. 12-13)

A map when viewed in this way is as broad as the definition and use of the term cartoon throughout this exegesis; it is not restricted to any particular kind of representation or purpose. Instead of a map, Deleuze and Guattari could be describing the Internet in the sense of being "open and connectable". Perhaps they are describing the ubiquity of online social media and the phenomena of remix-culture where the objects of all the media are subject to "constant modification... reworked by an individual, group or social formation." And perhaps for them the cartoons within SketchyTruth can be "conceived of as a work of art, constructed as a political action or as a meditation".

<sup>&</sup>lt;sup>33</sup> The Open Knowledge Foundation promotes free and easy access to information and content to be "freely used, reused and redistributed by anyone", especially government, research and cultural data, <a href="http://okfn.org">http://okfn.org</a>>.

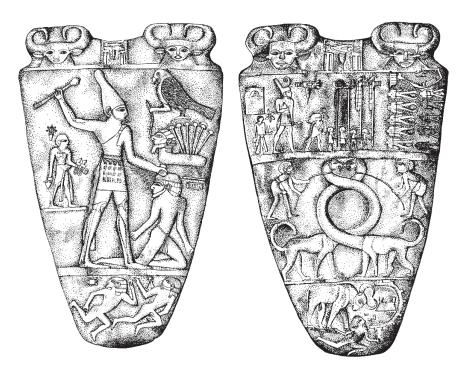
Broaden your understanding of what a map is—beyond geography—and you will realize that a map can be almost anything through which the relational and spatial orientation of parts allows us to perceive the meaning or function of a system. For example, a cut-away view of a machine's inner workings is in this regard is a map. The cut-away image describes the relationship between parts and reveals as a whole the machine's likely function. Magritte's surrealist pipe is a reflexive exaggeration, and like a map it is an abstraction and a replication in the sense of Baudrillard's Simulacra (Baudrillard 1994). If maps are databases of information visualized into meaningful relationships, then equally, a database of cartoons manipulated and displayed along "shifting" points of reference also forms a map:

> Artists chart singular perceptions rather than assert meaning for any collective truth... The Internet is itself a vast cultural map... This is a map of overwhelming proportions, a map whose reference points are practically impossible to pin down... In contending with such extremes of scale, both web cartographers and artists are recognizing the need for new kinds of cultural maps that acknowledge the impossibility of pinning down what is always shifting (Harmon & Clemans 2009, p. 15).

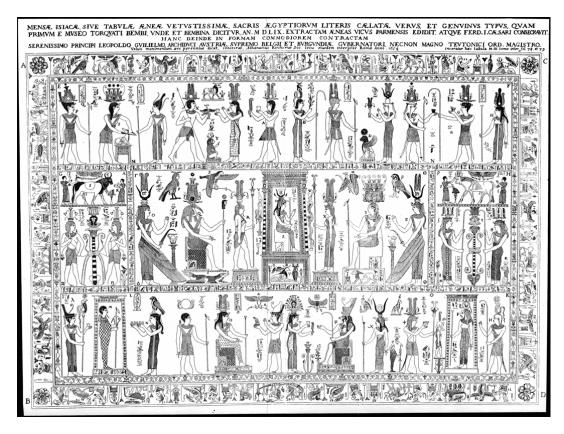


#### Cartoons encode

By looking at much earlier and culturally broader visual forms of communication—pictograms, petroglyphs, cave painting and other variations of symbolic-iconographic picture writing—we can see that visual reconstructions of reality have helped people communicate for millennia. The aggregation of visual information in these forms encodes cultural and historical dimensions, describing relationships, places, events and directions, often spanning long periods. Imagery has been essential in the narratives of human existence.



Narrative imagery from ancient Egypt on the Narmer Palette Circa 3100 BC (Smith & Simpson 1998, p. 12).



Ancient Roman visual story telling in the style of Ancient Egypt on the Bembine Tablet of Isis, Circa 1st Century (Wikipedia 2010).

Australian aboriginal paintings can reveal deeper layers of meaning once the appropriate cultural frame is considered. The bark paintings of the Yolngu people from Arnemland are maps, but in order to interpret them, one requires knowledge of local tradition and lore. Knowledge is conferred to those literate in the symbology through a narrative trajectory that transcends time and space:

> Dhulan are representations of concepts which are part of what Yolngu explain as 'djalkiri'. Djalkiri is a generic term, often translated as 'footprints of the Ancestors'... [and is] one of the network of concepts through which time, space, personhood and community are constructed in Yolngu (Turnbull & Watson 1993, pp. 32-5).





Visualising time, space, identity and community: Dugong and fire dreaming [left], Crocodile and fire dreaming [right] (Turnbull & Watson 1993, fig 5.4, p. 34).

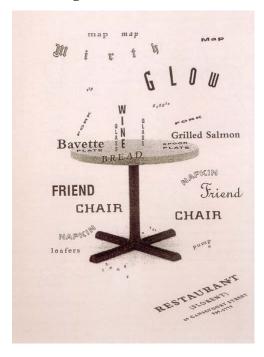




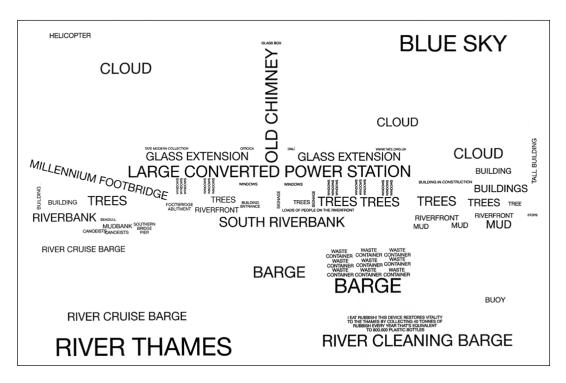
Cartoons used as cognitive and mnemonic devices can extend our thinking, drawing together diverse topics, catalysing our imaginations, and illuminating the unexpected.

At work in cartoons, diagrams, and sketches is the picture superiority effect, the psychological phenomena whereby pictures of things are remembered more easily than the names of things (Neisser & Kerr 1973; Paivio & Csapo 1973; Stenberg 2006). Through this effect, we facilitate the explanation, memory and comprehension of complex processes and intricate subjects.

Illustrating the picture superiority effect in a playful way, the typographic 'word pictures' that follow demonstrate the extra cognitive load required to make sense of visual scenes when images are absent.



Do you see it or read it? Typographic word pictures subvert the picture superiority effect (Harmon & Clemans 2009, p. 134).



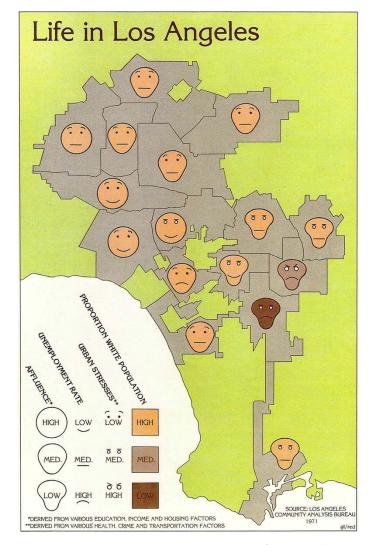
Replacing images with text labels significantly increases the mental effort required to understand a scene.<sup>34</sup>

Picture superiority traverses the cultural boundaries of written and spoken language. Visual language is by default the true universal language. Simplified graphic images can distill information down to the essentials, making difficult concepts and procedures much easier to grasp using few or no words at all. Done well, a cartoon can compress enormous amounts of information into just a few lines, as the examples that follow show us.

The first example that follows is an information graphic based on the ideas of Herman Chernoff (1973) who in acknowledging our ability to recognise the faces of people easily, used cartoon faces to map up to twenty or more variables, making it a convenient way to compress complex statistical data. The idea is that we notice subtle facial expressions easily. By relating facial variations to statistical values, the complexity of dealing with large data sets is radically simplified. The cartoon faces attract attention, even through small changes. In Eugene Turner's

<sup>&</sup>lt;sup>34</sup> Alberto Duman, *View of the Tate Modern*, London, 2007. "Duman devised a series of seven typographic prints depicting landmarks of London, his adopted home. Duman took photographs of the sites and placed words on each image in order to completely replace the visual components with labels" (Duman 2007).

information graphic Life in Los Angeles, lifestyle statistical measures reveal links between mood, location and demographics on a city map.



Cartoons and statistics help reveal social divisions in Life in Los Angeles, 1971 (Harmon & Clemans 2009, p. 139).

SimAssessment (Appendix C) a teaching assessment simulator, taking inspiration from Chernoff, explored the use of cartoon facial expressions to discriminate between four basic emotional states. The teacher using the simulator is able judge by the expressions on the faces of virtual students how effective their assessment plan is progressing.

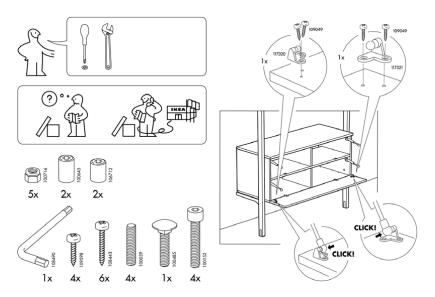
Simplified cartoon facial expressions play an important role in medicine with the Wong-Baker FACES Pain Rating Scale (Hockenberry, Wilson & Wong 2009). Situations where patients in pain are unable to communicate verbally;

young children, incapacitated patients and patients who don't speak the doctor's language, are able to point to a cartoon identifying their current pain level. The cartoon image takes all the complexity out of a challenging problem.



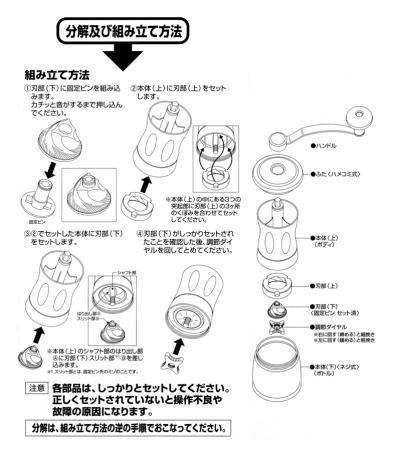
Cartoon faces replace words in the Wong-Baker FACES Pain Rating Scale (Hockenberry, Wilson & Wong 2009).

The lines and shapes of simple graphics can be an efficient and effective approach to otherwise complex communication problems. Done well, visual instructions can make the assembly of objects in pieces an easy task.

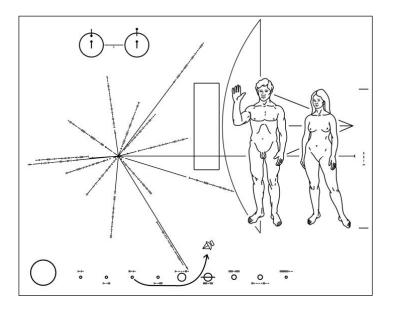


IKEA furniture visual assembly instructions.35

<sup>35</sup> Instructions digitally scanned from ANSSI catalogue item A20049741, Inter IKEA Systems B.V. 2002, ÄNGA catalogue item A50117248, Inter IKEA Systems B.V. 2007.



Assembly instructions for a Kyocera hand coffee grinder, Japan (digitally scanned from original product packaging).



Pioneer plaque, 1972-73, NASA. Engraved plate attached to the Pioneer 10 and 11 spacecraft, designed to communicate pictorially to potential extraterrestrial life about the human species (Wikipedia 1972-73).

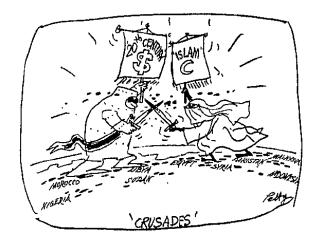


Universal symbols make orientation in public transport hubs easier (AIGA 2010).

By augmenting our memory, deepening our associations and broadening our comprehension, cartoons equip us to deal comfortably with large amounts of information. Rather than remembering the specifics, we need only a brief exposure to the cartoon image, which acts as a mental catalyst. The cartoon triggers a flood of connections, lightening our cognitive effort by providing just enough cues for us to quickly re-construct a detailed mental picture. The gestalt "phenomenon of observing the parts but perceiving the whole" is central to the medium's efficacy where "sometimes a mere shape or outline is enough to trigger closure" (McCloud 1993, pp. 63-64). Closure is the construction that occurs between comic panels or outside of the cartoon frame in both time and space, to 'fill in the blanks' and maintain narrative continuity.

Closure is akin to the effect experienced when we rediscover a forgotten photograph, smell a familiar aroma from our childhood or hear a song that marked a particular moment. In this way, the cartoon needs only contain the sparks necessary to ignite memory and imagination:

> When Petty calls out an image from the "weird sort of source" that lifts the audience out of the hurly-burly of the media sport of politics, it can, momentarily, reassess the shape of the world. Consider this one in the context of the War against Terror:



Cartoon: Bruce Petty, Crusades, 23 July 1971.

Only the names of the countries beneath the feet of Islam and the twentieth-century \$ give the date away as the early 1970s. It is not Petty's fault that this cartoon still makes you think. It is ours (Phiddian 2004, p. 176).



#### Everyone is an artist on the network

BAD ARTISTS COPY. GREAT ARTISTS STEAL.36

An important aspect of the proposed SketchyTruth prototype is that it will openly invite participants to duplicate and modify the work of other cartoonists. Whilst original cartoons about the news are necessary to stimulate a variety of debates, the re-examination of existing topics can also uncover new, alternative ideas.

The phenomenon of remix culture has evolved online to redefine ways of creating, viewing and reusing information that has become so readily accessible:

> We now inhabit a 'remix culture', a culture which is dominated by amateur creators – creators who are no longer willing to be merely passive receptors of content. Instead, they are demanding a much broader right, a right to mashup and remix material—to take on the role of producers—to cut, paste, sample or jam with content, in order to produce something which is distinctive of their own social and creative innovation (O'Brien & Fitzgerald 2006, p. 1).

BORROWING IS A GREAT TRADITION IN ART; EACH INDIVIDUAL PIECE OF ART IS PART OF A LARGER CONVERSATION. WITH TECHNOLOGY-BASED ART, WE HAVE THE ABILITY TO ENABLE BORROWING MORE DIRECTLY... WE FEEL FINE IS AN ARTWORK AUTHORED BY EVERYONE.37

<sup>&</sup>lt;sup>36</sup> Pablo Picasso, origin unknown, viewed 20 August 2009, <a href="http://en.wikiquote.org/wiki/Art">http://en.wikiquote.org/wiki/Art</a>.

<sup>&</sup>lt;sup>37</sup> Harris, J and Kamvar, S. 2006. We Feel Fine, viewed 20 April 2009, <a href="http://www.wefeelfine.org/">http://www.wefeelfine.org/</a>.

addtoany

People are sharing like "copy machines" (Pesce 2009). We love to share. It is in our genes, and one of our great evolutionary strengths.

An interaction designer coined the term productive interaction to describe the design of nonlinear environments that have emergent, selfdetermining qualities based on the interactions of users (Allen 2004). While not a wholly original concept, his reflection on the future of online journalism echoes the effects of online social media upon news media:

> In contrast to traditional media, productive interaction's strength is facilitating and provoking the dialog. It enables juxtaposition, and supports the remixing of the actual content.

> Productive interaction gives the reader a pair of scissors and permission to cut up the book. It's a system of direct manipulation, where the user becomes a codesigner in the creation of a custom content stream suited to their immediate desires, purposes and intents (Allen 2004).

#### The world's best sharing button



SketchyTruth as an online platform for cartoonists will be an exercise in letting go of full creative ownership. It will exhibit the characteristics of generative art; an autonomous space where participants determine the rules and outcomes, and where the "artist cedes partial or total subsequent control" (Galanter 2003, p. 4).

Nicolas Bourriaud describes a type of artwork—relational art—based upon relationships, interconnections and associations and where the artist is not so much at the centre, in control, but instead the catalyst or provocateur and where the inter-relationships of the audience define the work (Bourriaud, Herman & Schneider 2002). For the artist in a socially networked world, with the Internet as their 'canvas' the "artwork is no longer an end point but a simple moment in an infinite chain of contributions" (2002 p. 14).

EVERY NODE IS CREATIVE. IT'S DIFFICULT TO POINT TO AN ORIGINATOR. OR TO AN END POINT. THIS IS WHAT HAPPENS WHEN HUMANS ARE SUFFICIENTLY WELL CONNECTED TOGETHER.3

> There is no stasis in the form of the artwork, only a series of markers signifying the hand of the previous contributor. Every artist is a node. A cartoon in SketchyTruth is a node—and if popular enough—also the hub of a community. A cartoon has the capacity to act as a 'stepping-stone' amongst related cartoons and traverse many subjects. It is both the content and the catalyst for ideas.

<sup>&</sup>lt;sup>38</sup> Mark Pesce (Pesce 2010).

## Simple Net Art Diagram The art happens here MTAA ca. 1997

Simple Net Art Diagram: Art online occurs at the point where concepts are shared and information is manipulated (M.River & T.Whid Art Associates (MTAA) 1997).

In the Internet age of interactive database driven art (Manovich 2001), the artwork is never complete and is always in the process of being remixed – one person's creative output soon becomes another's input. The Artist in this dynamic context consciously chooses to separate themselves from both the form and readings of their work, allowing the participating community to take control and shape the work. Relational art in this sense is in continual production and rhizomic in growth, forever 'becoming' (Deleuze & Guattari 1987).

MOBILES CARRY AND PRODUCE, BUT ARE HARDLY THE END PRODUCT OF CONTENT. INSTEAD THEY MAKE IT MORE OF A CONTINUOUS, NON-LINEAR EXPERIENCE. BY TRANSLATING CONTENT INTO OUR INDIVIDUALISED EXISTENCE, AND EXPOSING IT TO OTHERS, MOBILES SHOW US THAT CONTENT NEVER DIES.3

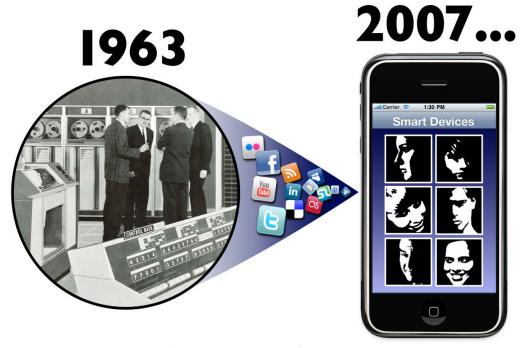
> Networked smart-devices are making it easy for us to become part of Bourriaud's "infinite chain" of contributions. They transform those of us that utilise the creative possibilities of the devices into the embodiment of Bourriaud's relational art. Smartphones and tablet computers in their ubiquity will form a nexus of democratic and creative expression, production, remixing, sharing and distribution of information in this decade, and beyond.

MOBILE ENABLES THE POWER OF THE WEB, THE COLLECTIVE INFORMATION OF MILLIONS OF PEOPLE... ACCESS TO JUST ABOUT EVERY OTHER MASS MEDIA TO LITERALLY BE OVERLAID ON TOP OF THE PHYSICAL WORLD, IN CONTEXT TO THE PERSON VIEWING IT.40

Sebastian Strakowicz (Strakowicz 2008).

<sup>&</sup>lt;sup>40</sup> Brian Fling (Fling 2007).

Combining audio-visual and multi-touch interfaces, an array of sensors and Internet access – the smart-device has brought us closer to cybernetic augmentation. We are becoming the device, and the device is becoming us. Augmented reality applications are here, with the smart-device enhancing our eyes and ears and extending our reach into the world more than any other electronic media device prophesied before (McLuhan 1964). The smart-device is also a platform for self-expression, a means for projecting our ideas and identity—our avatar—into a social network. The introduction of smartphones<sup>41</sup> with full web browsing capability has enabled the truly 'portable' online social network. Social media has put us inside our mobile computing devices and we are becoming the nodes in an electronic network of social connections and creative possibilities.

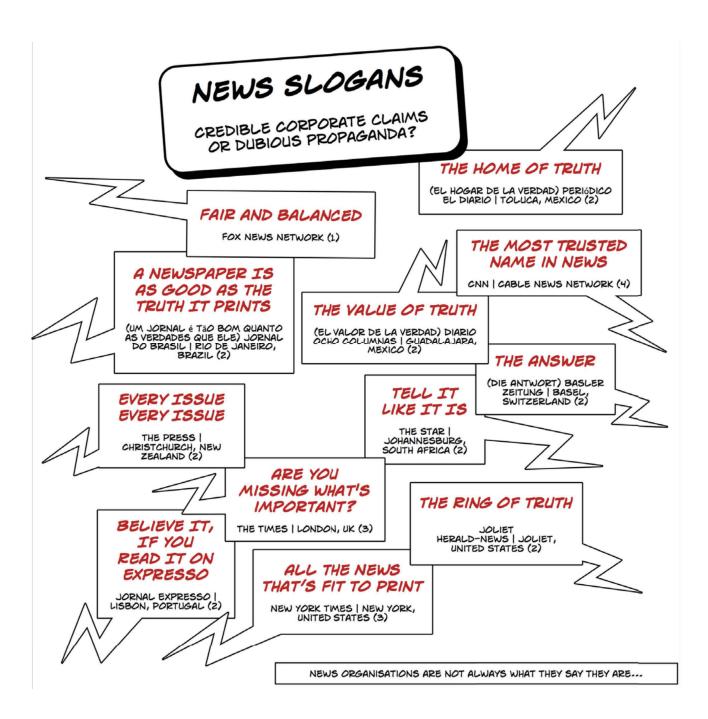


We are becoming the device and the device is becoming us. As smart phones and devices augment our lives the distinction between our real selves and our avatars is blurred. 42



<sup>41</sup> Although not the first smartphone, the launch of the Apple iPhone in 2007 marked the popularisation of social media in the mobile environment (Wikipedia 2011b).

<sup>&</sup>lt;sup>42</sup> My own graphic composition using two sources of visual assets ('Control Data 3200 Computer System - Real Time Applications | Computer History Museum'; Quaqe9 2009).



The same song, but different words: News slogans from around the world (CNN 2010; FOX 2010; INMA 2010; Vyavhare 2009).

### Why SketchyTruth?

#### The news is broken

Starting a chapter with the idea that 'the news is broken'<sup>43</sup> is to suggest perhaps sarcastically—that news organisations are not always authentic or successful in their lofty endeavours. The litany of hyperbole on the preceding page of news slogans illustrates this point to an extreme.

IN BROKEN NEWS, THE FRENETIC WORLD OF NEWS ISN'T ABOUT NEWS ANYMORE. IT'S ABOUT PREDICTIONS, SPECULATIONS, RECAP, TAKING A LOOK AT TOMORROW'S PAPERS OR YESTERDAY'S PAPERS, POSSIBLY EVEN LAST THURSDAY'S PAPERS.44

> Claims by the news media of accuracy, importance, exclusivity, timeliness, fairness, balance, trust and truth are claims to the absolute, and therefore conceited. While these laudable attributes are the currency that the news media trade for our attention, there is evidence to contest the veracity of those claims and therefore the validity of the news itself.



The news media and the public relations industry both play a role in reframing political 'facts'. 45

<sup>&</sup>lt;sup>43</sup> I am also referring indirectly to a television comedy satire Broken News (Broken News: About The Show 2005). "The show poked fun at the world of 24-hour rolling news channels. The title of the show is a play on the phrase Breaking News" (Wikipedia 2006a). The programme is described by the director as a response to a news space where "most stories on most news programmes are either pointless or absolutely terrifying (Armstrong 2005). 44 Broken News: About The Show, op. cit.

<sup>&</sup>lt;sup>45</sup> Allan Moir's cartoon depicts the (then current) prime minister knocked down by the opposition leader who is caricatured as an aggressive truck (Moir 2004).

Before embarking further on a critique of news institutions, it is important first to understand what news is. From a better-informed position can we begin to tell the difference between reportage and public relations, real events and fabrication, truth and propaganda, and 'good' news versus 'bad' news. I need to also make it clear that it is the system and not any individual responsible for the issues that I criticise. The drivers of the commercial media itself can distort news (Altheide & Michalowski 1999; Baker 2007; Davies 2008a; Herman & Chomsky 2008; Tester 2001), and while individual journalists might service this larger mechanism in this way, they might do so for no other reason than to keep their job and pay their bills.

THE ANSWER TO THE QUESTION "WHAT IS NEWS?" MAY SEEM OBVIOUS. NEWS IS WHAT IS NEW; IT'S WHAT'S HAPPENING.46

> News can be any information of current events that we deem important and that we actively seek or share, it is information that makes a difference. It has social and cultural value, which can be determined in terms of "Timeliness, Impact, Proximity, Controversy, Prominence, Currency and Oddity" (Potter 2006)<sup>47</sup>. It is gathered, edited and communicated typically by trained professionals called journalists, ideally according to a set of guiding principles (Statements of Principles 2009) and ethics in which the public places trust. News is supposed to provide a "truthful, unbiased report of the world's happenings" (AP news values & principles 2006) and issues of public interest within a journalistic code (Kovach & Rosenstiel 2007). 48 News is inherently a good thing in society.

<sup>&</sup>lt;sup>46</sup> Deborah Potter (Potter 2006, p. 5).

<sup>&</sup>lt;sup>47</sup> Ibid. A comprehensive exploration defining news is beyond the scope of this exegesis. Deborah Potter explores the meaning of these terms and what they imply for journalists in great detail.

<sup>&</sup>lt;sup>48</sup> Kovach and Rosenstiel outline nine guiding principles in the introduction to The Elements of Journalism:

Journalism's first obligation is to the truth. 1.

<sup>2.</sup> Its first loyalty is to citizens.

Its essence is a discipline of verification.

Its practitioners must maintain an independence from those they cover.

<sup>5.</sup> It must serve as an independent monitor of power.

It must provide a forum for public criticism and compromise.

<sup>7.</sup> It must strive to make the significant interesting and relevant.

<sup>8.</sup> It must keep the news comprehensive and proportional.

Its practitioners must be allowed to exercise their personal conscience.

The news industry's capacity to disseminate information is a benefit to us all. Yet, the quality of the news does not come with absolute assurances. Despite access now to many different sources of news, "We have more media and less information today" (Altheide 2009, p.1).



@RBReich via Twitter 28 July 2011.

Nick Davies, author of Flat Earth News (Davies 2008a) explores the decline of journalism as "a corrupted profession" and describes how conflicting claims confuse the truth. The objective of 'balance'—by providing both sides of an argument—disregards the fact that one side of an argument might be the accurate one worth promoting. Davies adds that the Public Relations (PR) industry supplies quotes and engages in tactics that manipulate the media by supplying content. It is a journalistic process he calls "churnalism". The barrage of churnalism described by Davies risks blinding us to the issues that matter.

The value placed upon news as a commercial product dominates the means and modes of its production (Herman & Chomsky 2008). There is a tendency toward soft news or infotainment, news driven by market forces (O'Connor 2009). Political and commercial interests, press releases and public relations creep into what ought to be independent enquiry (Baker 2007; Davies 2008a).

The news media sells speed, timeliness and accuracy of information. There is an authoritative "constant sense of urgency" (O'Connor 2009) designed to elevate the importance of news items. Implied is a privileged, unmediated access to sources of information only possible through the efforts of skilled journalists. The truth in this idea is sketchy at best as the study *Spinning the Media* showed:

> 55% of stories analysed [are] driven by some form of public relations—a media release, a public relations professional or some other form of promotion... journalism in Australia today is heavily influenced by commercial interests selling a product, and constrained and blocked by politicians, police and others who control the media message (Wendy et al. 2010).

MANUFACTURED NEWS IS CONTRIBUTING TO OUR SENSORY OVERLOAD AND "CONSUMERS ARE EXPERIENCING NEWS FATIGUE.49

> We are exhausted by the mediocrity in commercial news coverage because it is too sporadic, repetitive, superficial and incomplete (Ostertag 2010, p.599). Have you ever had the feeling that the news media was stirring up controversy, prolonging or creating 'drama' and sensationalizing events in 'media spectacles'?

NEWS IS BECOMING INCREASINGLY TABLOID, THRASHY [SIC] AND TRUTHIER AS IT SEEKS EVER WIDER AUDIENCES LURED BY THE LOWEST COMMON DENOMINATOR. EDITORS AND PROPRIETORS KNOW THAT PEOPLE LOVE HEARING ABOUT SCANDALS AND OUTRAGE, AND THEY WILL BRING IT TO THEM IF IT MEANS HAVING TO MANUFACTURE THEM.50

> In an era characterised by broad instantaneous global access to information and the twenty-four hour news channel, it is ironic that the scope of news media coverage seems to be narrowing. Concentrated media ownership seems to have an adverse affect on the quality of news streams (Baker 2007; Harding-Smith 2011; Herman & Chomsky 2008). Faced with dwindling readership as a new generation obtains their news through alternative online sources and social media, news corporations are forced to implement operational and economic efficiencies leading to "less investigative journalism, more syndication, and an

<sup>&</sup>lt;sup>49</sup> The Associated Press and the Context-Based Research Group (AP 2008).

<sup>&</sup>lt;sup>50</sup> Derek Barry (Barry 2009).

overall homogenization of the news" (Victor Pickard, Josh Stearns & Aaron 2009).

The replication of news content—syndication—comes at the cost of breadth, depth and relevance at local levels (Manning 2006). Editorial cartoons do not escape this syndication process. The mechanism of syndication emphasises one perspective over others, thus reducing diversity of opinion.

User generated and community-based news alternatives have appeared which attempt to address this problem (such as the examples described in Appendix C). Through alternative news channels<sup>51</sup> the public and independent journalists provide a healthy varied diet of news stories to redress the monoculture cultivated by the large news networks.

In a similar light, SketchyTruth sets out to address the need for diversity by facilitating the unrestricted expression of opinion through cartoons.

CONTROVERSY IS GIFT FOR THE NEWS, BECAUSE BY REPORTING ON THE CONTROVERSY YOU HELP FEED THE CONTROVERSY WHICH MEANS YOU CAN THEN DO A REPORT ON HOW THIS CONTROVERSY IS GROWING BY THE HOUR.52

> We are saturated by repetitive news of human suffering around the world to the point of "compassion fatigue" (Tester 2001, p. 528), our empathy overloaded, we disconnect. News media in this way contributes to a collective 'anaesthesia' a disinterest—as we are distanced from any real context and connection with the issues presented.

YOU HAVE THIS SPECTACULAR DISPARITY, BETWEEN AN ENORMOUS AMOUNT OF ATTENTION GIVEN TO AN OUTBREAK [OF DISEASE IN CENTRAL AFRICA] THAT KILLED 250 PEOPLE VERSUS A CIVIL WAR THAT KILLED MILLIONS AND WAS VIRTUALLY IGNORED.53

<sup>&</sup>lt;sup>51</sup> Indpendent news services, academic views and analysis can be sourced from organisations such as Crikey <a href="http://www.crikey.com.au">http://www.crikey.com.au</a>, New Matilda <a href="http://newmatilda.com/">http://newmatilda.com/</a>, and the Conversation <a href="http://theconversation.edu.au">http://theconversation.edu.au</a>>.

<sup>&</sup>lt;sup>52</sup> Charlie Brooker on *Newswipe* television series 2, episode 2, screened BBC4 2010, viewed 4 March 2010.

<sup>&</sup>lt;sup>53</sup> Dan Gardner on *Newswipe* television series 2, episode 1, screened BBC4 2010, viewed 4 March 2010. Dan Gardner is the Author of Risk: The science and politics of fear.

How much attention a news item gets through the media has become the de-facto measure of importance of a subject. This in principle should not be a problem, as it is what we expect from our news reporting. Unfortunately, importance and relevance—and sometimes the truth—do not always correlate. What the media focuses upon can on occasion be measured by a subject's capacity to be popular, or generate controversy and ultimately attract attention as David Altheide explains:

> "The mass media in general, and especially the electronic news media, are part of a "problem-generating machine" geared to entertainment, voyeurism, and the "quick fix "(Altheide 1997, p. 647).

How can we distinguish between 'truthful' news and misleading news? How do we identify propaganda, hoaxes, deceptions and advertorial when that news comes from what we traditionally accept as trustworthy sources of authority. A news organisation's credibility relies upon our belief that they are free from corruption, deception and error. This trust is key to the commercial value inherent in news services, it is why we might pay attention to the news and why we would pay for priveledged access to news information. But that trust and credibility can be challenged as events in 2011 have shown with the behaviour of one of the worlds largest news and media organisations (Murdoch media crisis Views & Research; Bacon & Price 2011).



Paradoxical? Lofty and unsubstantiated claims are typical of commercial news publishers advertising for new subscribers.54

<sup>&</sup>lt;sup>54</sup> Replica of an advertising flyer promoting *The Week* news magazine <a href="http://theweek.com.au">http://theweek.com.au</a>, manually recreated September 2011.

Our attention is the news media's currency. Consumer attention converts to popularity and ratings, both of which mean advertising revenue for the owners of news information streams. A shift under the influence of commercial competition and falling newspaper circulation has seen the popular news media focus on—as well as create—more sensational, popularist and entertainment style news formats.

The distinguished Australian journalist Peter Manning bemoaned this lowering of journalistic standards in a public lecture (2006). Manning described a number of problems with the news media:

> Less coverage of things that matter... A shift toward lifestyle journalism... Less variety of sources of news...[an] Anglo-American view of the world more than ever before... More reliance on government spin... Confusion between allegations and fact... A confusion of 'popular' with 'serious'.

IT ISN'T A FACT, IT'S WHAT SOMEBODY IN AUTHORITY HAS SAID.55

News is portrayed authoritatively with claims of being free of bias and containing 'just the facts', an idea contested vehemently by the highly regarded British investigative journalist Nick Davies (2008b):

> When you dig down into media coverage... and look for the facts on which it is based, you'll find there are no facts, it is just a muddle of popularist politics and popular misconceptions.

Claiming to be an authority to the 'truth' is an idea that the news media organisations promote in their self-interest:

> We all know that truth is elusive, especially when it comes to interpreting human events. But acknowledging that would weaken the mainstream media's authority. We wouldn't trust the media as much. And ultimately, authority, not truth, is what the media sell us (Weinberger 2006).

<sup>55</sup> Heather Brooke Journalist and Author speaking on *Newswipe* television series 2, episode 2, screened BBC4 2010, viewed 4 March 2010.

OUR MEDIA HAVE BECOME MASS PRODUCERS OF DISTORTION. AN INDUSTRY WHOSE PRIMARY TASK IS TO FILTER OUT FALSEHOOD HAS BECOME SO VULNERABLE TO MANIPULATION THAT IT IS NOW INVOLVED IN THE MASS PRODUCTION OF FALSEHOOD, DISTORTION AND PROPAGANDA.56

> Carried along on a wave of bias and propaganda news can manufacture interest and attention. News standards can be compromised, not by conspiracy, but by the structures of the media itself. In the classic examination of media bias Manufacturing Consent, five information "filters" affect the quality and validity of news media:

> > (1) the size, concentrated ownership, owner wealth, and profit orientation of the dominant mass-media firms; (2) advertising as the primary income source of the mass media; (3) the reliance of the media on information provided by government, business, and "experts" funded and approved by these primary sources and agents of power; (4) "flak" as a means of disciplining the media; and (5) "anticommunism" as a national religion and control mechanism (Herman & Chomsky 1994, p. 2).<sup>57</sup>

Methods for shaping public opinion are based around manipulating perceptions of fear—and manufacturing news—to create platforms for social policy (Altheide & Michalowski 1999). The vehicles for fear generation include terrorism, drugs, violence and crime, pandemics and disease, environmental issues and immigration.<sup>58</sup>



@andracula via Twitter, 02 February 2011.

<sup>&</sup>lt;sup>56</sup> Nick Davies (Davies 2008c).

<sup>&</sup>lt;sup>57</sup> While the fifth filter described by Chomsky and Herman, "anticommunism" can no longer be an agent to generate public fear that it once was, alternative agents for generating fear—like terrorism—have simply replaced it.

Memorable examples promoting fear in the media include 'the war on terror', 'the war on drugs', the fictitious and infamous Iraq 'weapons of mass destruction' and refugees or the so-called 'boat people'.

Whether the focus on these issues is to fill quiet news periods—injecting drama, threat and controversy to sell more news—or to act as political smoke screens and diversions, they tend to resurface in cycles in the news media. Occasionally they are promoted at the expense of other equally newsworthy—and sometimes—more pressing issues. Every year there are "250 million malaria cases and nearly one million deaths" (WHO 2009). When did you last hear about malaria in the news?

THE NEWS SEEMS TO CONSIST SOLELY OF FINANCIAL APOCALYPSE, CELEBRITY ILLNESS, TERRORISM, AND SPREE KILLINGS ... 'IF IT BLEEDS, IT LEADS' ... BAD NEWS WINS. 59

> At stake is a balance between the depth, breadth and sensitivity of news coverage and the values of credibility, relevance and importance of news information. News consumers are moving out of the reach of broadcast media and into the highly personalised, fragmented interactive environment of portable and hand-held devices. In this environment, what makes news important will depend upon any particular individual's interests and context as much the extent and agenda of social network they engage with. Empowered by the Internet and access to information outside of news organisations, initiatives will continue to provide alternative sources of news information, free from the perceived bias, filtering and control of the mainstream news organisations (Appendix D lists a number of web platforms that challenge traditional news sources). Subject to its own biases and inadequacies, news in this space will be shaped less by commercial agendas and will evolve into narratives that are more complete with continuity, relevance and context (*Living Stories* 2010).

> John Perry Barlow foretold in 1996—when the World Wide Web was only four years old—the rise of the citizen journalist in an interview:

> > INTERVIEWER: Do you think people are generally tired of the top-down model of journalism, where professional

<sup>&</sup>lt;sup>59</sup> Charlie Brooker (Brooker 2009).

journalists decide what's important for the public, where it's all push and no pull?

JOHN PERRY BARLOW: They're absolutely sick of it. Most people have become profoundly skeptical of what they read through mass media. For all intents and purposes, the mass media have become a collective hallucination. People want to bypass those channels to increase the level of direct experience, to have a much more direct contact with reality and with the subjects they feel closely about. And so, to the extent that people can disintermediate, that's what they do... A mass medium exists to confirm the illusions of the crowd, and to sell the attention of that audience (Lasica 1996).

Barlow's Orwellian view portends the end of news media as we have known it. Indeed, fifteen years of Internet evolution and revolution have forced news media organisations to rethink how they package and sell news. We can now get our news online from many sources, outside of the advertising revenue driven news streams in traditional media. We are no longer willing to give our attention away so easily for commercial purposes, but we are happy to give our attention freely to each other on our online social networks. In Barlow's words, we seek "to increase the level of direct experience, to have a much more direct contact with reality and with the subjects" we care about.

After Barlow originally made these comments in 1996, weblogs—or blogging—became a global phenomenon and a standard part of online activity to satisfy our need to "disintermediate". Predictions that, "a new form of online media will develop to fill the lack that many citizens experience?" have become fact (Sauer-Thompson 2007).

THE BLOGGER'S CRITIQUE OF THE ESTABLISHMENT MEDIA IS GROUNDED IN A DESIRE FOR LESS SPIN AND DROP FEED AND MORE INDEPENDENT JOURNALISM AND COMMENTARY.60

<sup>&</sup>lt;sup>60</sup> Gary Sauer-Thompson (Sauer-Thompson 2007).

Social media, or inclusive participatory media (Rheingold 2007) and the supporting communication platforms<sup>61</sup> are today the foundation of many online interactions. News in the social network is intimate, it travels faster and without the kind of mediation and filtering that is typical of the mainstream news networks.



<sup>&</sup>lt;sup>61</sup> Appendix D lists a number if web platforms that challenge traditional news sources.

#### Enter the citizen cartoonist

I CAN'T ANSWER REALLY THE QUESTION OF WHAT IS NEWS, BUT IF YOU READ TOMORROW'S EXAMINER YOU'LL SEE WHAT OUR NEWS TEAM THOUGHT WAS NEWS TODAY. 62

The problem is not that our news is filtered—how else could we cope with so much information—the issue is how it is filtered and by whom. To what degree can we trust a news information flow that is largely determined by governments and corporations, vested interests, and unknown agendas? If the public relations industry helps shape the information we finally consume, what are our alternatives? There is a plethora of socially based web services that already aggregate and rate news information<sup>63</sup>, but it is still the same information. Rather than duplicate both the content and approach of these existing services, how can we take a closer look at the news? I propose a visual alternative through the lens of user-generated cartooning.

NOW THE GLOBAL NEWS MACHINE HAS CHANGED THE WAY THE WORLD REACTS TO EVENTS. THE FREE FLOW OF INFORMATION IS VITAL TO DEMOCRACY, IT SCRUTINISES THOSE IN POWER. BUT WHAT ABOUT THE SCRUTINISERS THEMSELVES, WHO SCRUTINISES THEM? WHO HOLDS THE NEWS MACHINE TO ACCOUNT?"

> While a distributed online community cannot replace good journalism, the online community can however apply its "cognitive surplus" (Shirky 2010) to the task of filtering out the bad journalism and misinformation. In an era marked by the "mass ammateurization of media" (Shirky 2008a) it is inevitable that we see the rise of the citizen cartoonist to complement the growing army of citizen journalists already providing an alternative public voice to commercial media. I have imagined citizen cartooning to sit amicably alongside the work of editorial

<sup>&</sup>lt;sup>62</sup> Rodd Scott, Editor of the Launceston Examiner (Scott 1999).

<sup>&</sup>lt;sup>63</sup> Newsvine <a href="http://www.newsvine.com/">http://digg.com/</a>, Reddit <a href="http://www.reddit.com/">http://www.reddit.com/</a>, Alltop <a href="http://alltop.com/"><a href="http://theblogpaper.co.uk/">http://theblogpaper.co.uk/</a> are just a few of the folksonomy (user-generated taxonomy) driven news aggregators which editorialise news information from mainstream media and weblogs. In these social news websites variations of tagging, voting and recommendation systems determine a story's relative importance or popularity; therefore collectively determining what gets attention. Appendix D lists a number if web platforms that challenge traditional news sources.

<sup>&</sup>lt;sup>64</sup> Alan Little (Little 2007).

cartoonists already embedded in the news media. Cartoonists number few when compared to the legions that write the news, so citizen cartooning can only bolster the professional cartoonist's manifest desire to share what they read between—and behind—the headlines:

> Cartoonists are licensed skeptics who provide one important medium where the spin that is epidemic in public life can be countered, one forum where the shameless can be shamed and open secrets spoken (Manning & Phiddian 2004a, p. 28).

> Cartoonists do not exist in a vacuum; they exist in our world, a world full of political spin and rhetoric orchestrated by leaders and their burgeoning staff of research and media advisers. We don't expect to receive a balanced description of reality from a leader's doorstop interview, press release or policy speech. Cartoonists are one group that seeks to counter the spin of stage-managed public debate (Manning & Phiddian 2004b, p. 34).

The Internet has empowered the individual with the ability to seek out and verify sources of information independently from the constraints of privately controlled media structures. This in turn has 'lifted the veil' on news media organisations. Now news information can undergo detailed scrutiny while the authority of news media organisations as the purveyors of 'truth' or 'fact' can be directly challenged. SketchyTruth is about allowing anyone to visually express their views on the content of the news, as well as determining what warrants a headline.

AS THE WEB CHALLENGES MASS MEDIA WITH A MEDIA OF THE MASSES, WE WILL ENJOY AN UNPRECEDENTED ABILITY TO SELECT OUR SOURCES AND CHOOSE OUR NEWS. 65

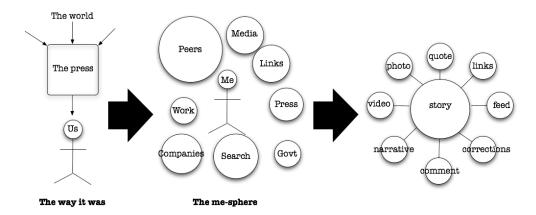
> News is no longer information only from media organisations, and it is no longer only compiled by journalists. The changing nature of journalism online illustrates the shift from the top-down broadcast model to a more open, selfdirected model with the news producer/consumer at the centre:

> > [Starting with] the way things were: news through the filter of the press to us with few other options... When we put the

<sup>&</sup>lt;sup>65</sup> Peter Morville (Morville 2005, pp. 6-7).

public at the center of the universe... we see the choices we all call upon [for our information]... So this yields a different view of the news story itself...

Stories and topics become molecules that attract atoms: reporters, editors, witnesses, archives, commenters, and so on, all adding different elements to a greater understanding. Who brings that together? It is not always the reporter or editor anymore. It can just as easily be the reader(s) now (Jarvis 2008).



The press becomes the 'press-sphere' involving sources and contribution beyond the reporter or editor (Jarvis 2008).

The relevance of news relies upon its context and point of view. Newsworthiness, what is important to you or I does not always mirror what the news media decides is important on our behalf. If it is new and is interesting to your friends and community, then it is news (McKane 2006, p.1). Context is paramount in determining what constitutes news, or is considered newsworthy. This is the perspective of the news consumer:

> This is the point of view of news that's relevant: the point of view of the user of news... And when they see lies and BS in the news, they think about how they can get accurate information ...just at the moment the news industry is breathing its last breath, we have the tools to build our own (Winer 2008).

The news consumer in the era of the Internet has an opportunity—a need—to be more critical, more selective of the information available online. The interconnectedness and speed of the Internet means we can be more responsible

for what constitutes news. With good timing and the right context—and equipped with our new smart-devices—we all have the capacity to generate something newsworthy and make our own news headlines:

> The change isn't a shift from one kind of news institution to another, but rather in the definition of news: from news as an institutional prerogative to news as part of a communications ecosystem, occupied by a mix of formal organizations, informal collectives, and individuals (Shirky 2008a, p. 65).

We have a responsibility to ensure that governments and corporations are held accountable for the accuracy and quality of information reported to us through the news. Thanks to the enabling qualities of the Internet, information of significant events and socially important issues can be shared outside of the control of mediating structures. News information in the public interest should be free, not withheld, not filtered or manipulated into a scarce commodity in a drive for profit. Dan Gillmor in the introduction to his book *We the media*, makes an impassioned call for the opposite to that sought by the oligopolies of news and media:

> We can't afford to treat the news solely as a commodity, largely controlled by big institutions. We can't afford, as a society, to limit our choices... demands on Big Media are dumbing down the product itself (Gillmor 2004, p. xxiv).

The challenge to the power structures who control information flows are the online networks that disrupt and disempower authority. A very contentious example of the disruptive power of the Internet over government and big business is the whistleblower website WikiLeaks<sup>66</sup>, which the Time Magazine suggested "could become as important a journalistic tool as the Freedom of Information Act" (Schmidt/Washington 2007).

The collective, attentive input of a distributed and diverse network of cartoonists willing to provide their editorial skills can form the backbone of this

<sup>66 &</sup>quot;WikiLeaks is a multi-jurisdictional public service designed to protect whistleblowers, journalists and activists who have sensitive materials to communicate to the public" (WikiLeaks 2010).

challenge. Collectively, they can participate in decoding, re-shaping, reclassifying and remixing news.

UNTIL RECENTLY WE'VE LIVED IN A CONTROLLED MEDIA ENVIRONMENT - THE ABILITY TO REPORT AND SHARE INFORMATION WAS LIMITED TO THOSE THAT CONTROLLED THE TECHNOLOGY THAT MADE IT POSSIBLE - THOSE WHO OWNED THE PRINTING PRESSES, RADIO AND TV LICENCES. BUT MORE IMPORTANTLY NEWS WAS CONTROLLED BY THOSE IN CHARGE OF DECIDING WHO /WHAT / WHY AND WHEN SOMETHING WAS NEWSWORTHY.67

> A utopian vision is that the Internet will evolve into a predominately transparent "hyper-connected" (Pesce 2008b) and accessible information space. "Wise crowds" (Surowiecki & ebrary Inc. 2004) will not just help us filter through the stuff in the news that matters, but that a well-informed social community will also seek out, generate and pass on valuable and credible information that is beyond the means of any mainstream commercial news purveyor.

A CARTOON IS 'LOOKING UNDER AND BEHIND THE SURFACE OF EVENTS, READING BETWEEN THE LINES, UNRAVELLING THE SPIN DOCTORS' SPINNING'. 68

> SketchyTruth is an opportunity for cartoonists with conscience to exercise their judgement, share their insights and voice their opinion unshackled by the constraints of the editorial policies of news media organisations. In the same way journalists are able to voice themselves independently through blogging, cartoonists can digitally publish cartoons that would never make it past corporate censorship. The "unprintables" in the words of cartoonist Bill Leak can now go viral instead (Bruce Petty and Bill Leak in conversation 2008).



<sup>&</sup>lt;sup>67</sup> Bronwen Clune (Clune 2009).

<sup>&</sup>lt;sup>68</sup> Cathy Wilcox (Wilcox 2002).

## Drawing on a diversity of opinion, can a wise crowd fix the news?

What if the news we consumed was influenced less by news organisations and instead by a more globally distributed, independent and diverse range of opinions that we can encounter online?

In assessing truth and accuracy, if we look at the persuasive qualities of news media in the context of the Elaboration Likelihood Model (Petty, Cacioppo & Leonard 1986) we can start to understand how opinion and beliefs form around information presented in the news. Simply, we either respond in a slow considered way to information based on its perceived merit before forming our opinion—the central route to persuasion—characteristic of broadcast news and it cohort of 'experts'. Alternatively we make a quick assessment based on affective influences, peripheral cues, inferences and associations—the peripheral route to persuasion—typical of conversation, gossip and social networks both on and offline. The more removed a news consumer is from the news information source in terms of interest or knowledge, it is more likely that person will adopt an opinion influenced by either the perceived authority—the news commentator—or, the most popular or loudest opinion.

News saturation and repetition reinforces a notion of credibility and accuracy, regardless of the facts. The 'more-we-hear-it, the-more-we-believe-it' approach to persuasion was used famously in the weapons of mass destruction (WMD) propaganda in the lead up to the Iraq Invasion of 2003 (Kull, Ramsay & Lewis 2003).

...IT'S NOT CLEAR THAT A BARRAGE OF NEWS IS NECESSARILY CONDUCIVE TO GOOD DECISION MAKING... NEWS REPORTS TEND, BY THEIR NATURE, TO OVERPLAY THE IMPORTANCE OF ANY PARTICULAR PIECE OF INFORMATION.<sup>69</sup>

<sup>&</sup>lt;sup>69</sup> James Surowiecki (Surowiecki & ebrary Inc. 2004, pp. 254-255).

Judgements we make of information in the news are influenced by the existing opinion of commentators in the media or the beliefs of people around us. This is often true of complex issues—like economics—of which we have at best, a 'sketchy' understanding. The erosion of independent thought from waves of repetitive news reporting pushes us into common agreement. This is effectively a state of media facilitated groupthink, which is:

> a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' strivings for unanimity override their motivation to realistically appraise alternative courses of action (Janis 1972, p. 9).

News aggregation websites<sup>70</sup> through voting, promoting and ranking mechanisms set out to address this problem. Readers take part in assessing the importance of news and in some cases they are also the producers of the news. Because these news aggregation websites encourage collaboration, news can get elevated in importance not by merit, but by popularity.

All of these services rely on aggregating existing feeds of mainstream news and/or weblogs. These services all have variations on social filtering, voting, popularity and recommendations mechanisms. They all have measures for credibility and news worthiness to help sort the news feeds they take in. In common with all these sites is that the filtering takes place primarily upon textual information. None of these operate fully in the ways outlined by Surowiecki (Surowiecki & ebrary Inc. 2004) for ensuring wise decisions are made and unfortunately—these socially mediated news sources can suffer from the groupthink that occurs when news media and social communities draw upon themselves for opinion.

 $<sup>^{70}</sup>$  Newsvine <a href="http://www.newsvine.com/">http://digg.com/</a>>, Reddit <a href="http://www.reddit.com/">http://www.reddit.com/</a>  $\rightarrow$  and theBlogPaper <a href="http://theblogpaper.co.uk/">http://theblogpaper.co.uk/</a> are just some of the news aggregators, which harvest news information from other news media and weblogs. They use variations of; tagging, voting and recommendation systems to determine a story's popularity, and therefore prominence within online listings.

IT'S NOT INFORMATION OVERLOAD. IT'S FILTER FAILURE.71

To avoid groupthink, James Surowiecki argues for a filtering mechanism that helps maintain relevance and accuracy of information by tapping into a distributed pool of knowledge. A mechanism to facilitate wise decision making and to avoid groupthink—in Surowiecki's view requires four conditions to be present in the community of interest: cognitive diversity, independence, decentralisation and easy aggregation of opinions. For SketchyTruth to succeed in its mission, the application will have to operate in ways that respect the four conditions outlined by Surowiecki. We may have to place our trust in the 'wisdom of the crowds' to provide us with an accurate truthful perspective on news events.



<sup>&</sup>lt;sup>71</sup> Clay Shirky (Shirky 2008b).

#### Making the news visible

WORDS ARE EASILY FORGOTTEN, BUT PICTURES STAY IN OUR MINDS.72

SketchyTruth is a visual news filter and a way of portraying news that cannot be reduced to words alone. There are many alternative forms of news consumption—some of which are summarised in Appendix C—but usually these alternatives favour text. While SketchyTruth it is a combination of text and image similar in form to editorial newspaper cartoons, it is much more than that. Augmented by the enabling technologies which are now standard in smart-devices; sensors, location awareness and constant Internet connections, news consumption has become personal and interactive.

A MOBILE PHONE IS A COMPUTER IS A MEDIA DEVICE IS A COPY MACHINE IS A RADIO IS A BROADCAST TOWER — HERE, TODAY, NOW.  $^{73}$ 

A cartoonist no longer has to respond for requests from news editors, they can express themselves through an entirely democratic channel, unmediated and unrestrained. Every smart-device user has the capacity to produce media and share information within a social network:

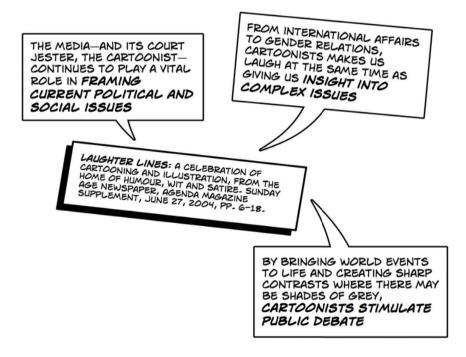
The explosion of social networks definitively broke the hegemony of the one-to-many system, and mobile communication is changing the dynamics of content production, distribution and consumption (Scolari 2009).

Cartoons can support many layers of meaning and analyses, yet on the surface this visual mode of communication can appear deceptively simple. Cartoons are versatile vehicles for communication that can cut deeply into social issues, they are able to focus attention upon a specific issue with alarming accuracy with little mental effort.

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<sup>&</sup>lt;sup>72</sup> Paul Martin Lester (Lester 2006).

<sup>73</sup> Gerd Leonhard (Leonhard 2007, p. 1).



From a feature newspaper article exploring the role of editorial cartoons ('Laughter lines: A celebration of cartooning and illustration, from the home of humour, wit and satire.' 2004).

SketchyTruth is a form of social news analysis that draws upon the subjective style of newspaper editorial cartoons, where the 'truth' is present only though a set of visual clues. Given that the notion of truth surrounding complex social and political issues is rarely absolute, SketchyTruth celebrates relativistically—the uncertainty surrounding these issues by providing an opportunity to express the inconclusive, the inexplicable and the confusing.

CARICATURE IS ROUGH TRUTH.74

Where the mainstream news claims to convey the facts alone, SketchyTruth sets out to describe the conditions and contexts surrounding the 'facts' in the news. Provoking us to examine the issues raised by news reports, the cartoons in SketchyTruth encourage us to make our own suppositions about those 'facts'.

THERE ARE NO FACTS, ONLY INTERPRETATIONS.75

<sup>&</sup>lt;sup>74</sup> George Meredith (Meredith 2004, p. 386).

<sup>&</sup>lt;sup>75</sup> Friedrich Nietzsche (Wicks 2013).

SketchyTruth promotes a re-negotiation of the 'truth'; between what the media represents and what it commodifies, and what as an individual we simply experience or feel about the news. It does not set out to create the truth, but instead acts as a reminder of our independence in determining what might be true. It allows us to construct a personal truth based on the snippets of news information—the particles of truth discussed earlier—that we take for granted.

Participants engage in their own subjective analyses and evaluation of news information through an interactive visual exploration. It is an attempt to filter, aggregate and map patterns in our collective subjective assessment of the world through news headlines. Contributions on the 'infinite' canvas of the SketchyTruth world create a communal mirror, reflecting the global feeling and perhaps revealing the dominant affective qualities of the news content that we consume daily.

In this project I am interested in our collective sensitivities to the news how the news makes us feel—and I view drawing as a way to make those feelings visible. I want to enable a participant in SketchyTruth to both contribute and confront their personal or subjective position on that news that affects them most.

While SketchyTruth is in part a reaction to privatised information control, I acknowledge the inevitable hypocrisy in this sense as the designer, where the display of information is constrained and shaped by the application. In creating another type of news filter, I am complicit in the whole process of information control. Yet, I do expect that there will be enough freedom provided inside the SketchyTruth dataspace for the opinions and ideas of participants to grow unfettered and uncensored.

The vision for SketchyTruth is that it becomes an exploration of a collective information space using drawing as the vehicle to express subjective responses to news, issues and experiences. The cartoons will describe what words alone fail to encapsulate, and participants' feelings about the news are made visible in an unashamedly self-conscious way. These feelings about the news are embodied in the stream of cartoons producing an ambient awareness<sup>76</sup> (Thompson 2008).

The infinite canvas of SketchyTruth is a modern version of a prehistoric cave wall adorned with art. In the caves of prehistory, concepts were explored visually in an attempt to understand and invoke some form of power over the subjects while also serving as a form of tribal cohesion – the original social media? In contemporary terms, the markings on the wall might be called graffiti; ranging from the trite and trivial right through to inspiring images that are socially or politically motivated. SketchyTruth is 'cave painting' for the masses using pixels instead of paint.

Eventually from this global visualisation of aggregated cartoons there will emerge new meanings, new knowledge and new understandings from the "montage" of opinion (Manovich 2001, p. 272). The cartoons become a longterm contextual record in a global digital scrapbook, while also revealing spatial and thematic patterns in the social effects of the news. The cartoons in SketchyTruth will become meta-news; visual traces of the news and explorations of the space between the news headlines.

By drawing the world we may be able see it differently, understand some of its complexity. The act of drawing—cartooning—is as much an analytical process as it is representational of events and objects in the world. Through engaging

<sup>&</sup>lt;sup>76</sup> Ambient awareness results from extensive contact and exposure to people and conditions in a social network. It could be described as a sensitivity to feelings and sentiment because of proximity. At some level it provides an insight into the tacit knowledge held by members of the shared space. Twitter and FaceBook are cited as examples of this phenomena in online social networks.

directly with the news and attempting to define it visually, perhaps we can understand its character better:

"Those who discover an explanation are often those who construct its representation (Tufte 1997, p. 9).



### Amplification through simplification

LESS IS MORE.77

While we may commonly think of abstraction in terms of the visual, we need to remember that any form of communication—visual, aural, tactile, gestural—involves an abstracted suite of symbols and an agreed set of codes to be practical. Describing real-world events in the news necessarily involves varying levels of abstraction. The most abstracted of which is the pithy news headline and sensational short story typical of popular commercial news formats. While this level of simplicity is useful in terms of quickly grabbing attention and conveying a basic idea, broader—and at times, important—contextualising information is missing in a news headline.

PEOPLE KNOW WHAT THEY THINK WHEN THEY SEE WHAT THEY SAY. 78

Maps, drawings, diagrams, sketches, and cartoons are all abstractions through visual means. An open system such as the citizen-cartooning platform proposed by SketchyTruth, utilises a combination of abstraction and simplification techniques of the kind pioneered in comics and cartoons.

Comics are a "vessel which can hold any number of ideas and images" (McCloud 1993, p. 6). Similarly, cartoons have the capacity to act as a form of visual compression, embodying many layers of meaning that would otherwise require volumes of text-based description.

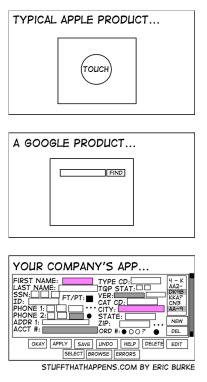
THE MORE MINIMAL THE ART, THE MORE MAXIMUM THE EXPLANATION.  $^{\!\mathcal{P}_1}$ 

<sup>&</sup>lt;sup>77</sup> Ludwig Mies van der Rohe, (Mies: The Man, The Legacy 2012).

<sup>&</sup>lt;sup>78</sup>Karl.E.Weick (Weick 1995).

<sup>&</sup>lt;sup>79</sup> Hilton Kramer (Kramer 1974, p. 412).

The idea of abstraction, reduction and simplification of complexity—in order to 'see' clearly—has parallels across many disciplines. Whether making a map, drawing, creating a diagram, a cartoon – these visual activities all rely on a process of abstraction, where ideas are simplified down to the smallest, most useful communicable units. Occam's Razor, the assertion that the simplest explanation is usually the best, is at the heart of many investigations into simplifying the complex.



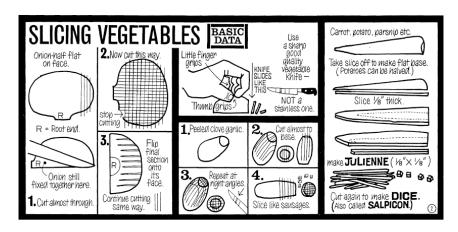
In interface design, simplicity plays a part in usability (Burke 2008).

"The Smallest Effective Difference" for Edward.R Tufte is "what can be done with fewer is done in vain with more" (1997, p.73). Exploring information design he describes the objectives of the discipline as seeking a "clear portrayal of complexity... visual access to the subtle and the difficult, the revelation of the complex" (2001, p.191). For Tufte:

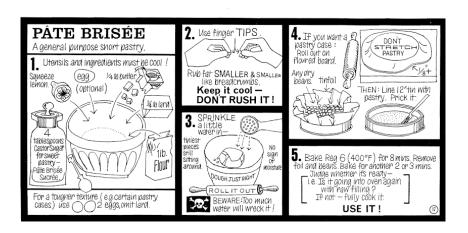
> Graphical excellence consists of complex ideas communicated with clarity, precision, and efficiency. Graphical excellence is that which gives the viewer the greatest number of ideas in the shortest time with the least ink in the smallest space (2001, p. 51).

Len Deighton's famous instructional cartoons called 'cookstrips' originally published in the British newspaper, The Observer, helped simplify the challenges of French cookery by visually presenting the utensils, ingredients and steps necessary for the job.80

STRIP Nº 2 The sign of a professional chef is evenly cut vegetables



STRIP Nº 17 Short pastry



Cooking as a process is well suited to 'wordless' communication in visual instructions. 81

By using an abstracted comic-like format—such as that described by McCloud—Deighton was able to eliminate all but the essential detail to help

<sup>&</sup>lt;sup>80</sup> Deighton was targeting men by reducing cooking down to what looked like a basic instruction manual for bachelor males. These panels became a book called the Action Cook Book, and in a more recent revision openly named Len Deighton's French Cooking for Men.

<sup>81</sup> Cookstrips No.2 and No.17 illustrate how the language of comics and cartoon are used to compress what would otherwise be pages of written instruction (Deighton 1979).

focus on the key ideas, and speed comprehension. Photographs would only have overburdened the presentation with unnecessary detail<sup>82</sup>.

In neuroesthetics, Semir Zeki looks at the process of abstraction that occurs in the brain—the mental shortcuts—that help manage informational information overload (Zeki 2009). It is the kind of 'close enough is good enough' approach described by Herbert Simon with his ideas on bounded rationality and the concept of satisficing (Ibrahim 2009; Simon 1991) where a satisfactory or sufficient choice is made when faced with an overwhelming amount of information:

> Bounded rationality explains why human beings faced with immense complexity and cognitive limitations deal with their decision-making tasks by constructing simple models of reality (Ibrahim 2009, p. 3).

For Simon there is a pressing need to cope with the "poverty of attention" that information overload causes and a need to find ways to direct our attention to where it really counts (Greenberger, University & Institution 1971). Whether we are mentally taking shortcuts or *satisficing*, the problem remains; how do we simplify the complexities of the world and—at the same time—provide an adequate mechanism to navigate through that complexity?

The motor vehicle dashboard with its array of instrumentation and feedback displays is archetypal of this idea of abstracting the complex and then distilling that into a simpler representation. Without the abstraction we see in a dashboard, our ability to make quick, practical decisions from multiple sensory inputs is significantly reduced. The indication on your speedometer for example is not your speed, it is a simplified symbolic representation of the rate of change of position using two variables: distance and time. This is a subtle but important distinction.

<sup>&</sup>lt;sup>82</sup> It is likely that the limitations of black and white printing technology for newspapers in the sixties and the need for Deighton's panels to be presented as comic strip panels in limited space were the main reason a photographic approach wasn't used.



In a motor vehicle instrumentation display, complex mechanical variables are distilled down to the most important forms of information representation (ThePierreR 2008).

René Magritte toys with our concept of the real and its representation in his famous painting of a pipe, The Treachery of Images. The inscription reads "this is not a pipe", reminding us that the symbol is not the thing itself.



The symbol is not the thing; this is not a pipe (Magritte 1928-29).

Despite Magritte's assertion, the "treachery" of an image is also a useful ally in recording ideas, describing objects, processes and explaining concepts. We readily accept a direct correspondence between the image and the ideas that the image stands for - the sign and the signified, merge. In the cartoon image we do not see a picture representing an object, an idea, we are fooled into seeing the idea itself.

While a map is not the territory that it represents, a map is often referred to in terms of the things it represents, as if those things inhabit the map as they do in the real world. A map is a proxy, corresponding to a concept of the world, according to a set of rules. This kind of abstraction through metaphor serves very practical needs:

> A map is not the territory it represents, but if correct, it has a similar structure to the territory, which accounts for its usefulness (Korzybski 1958, p. 58).

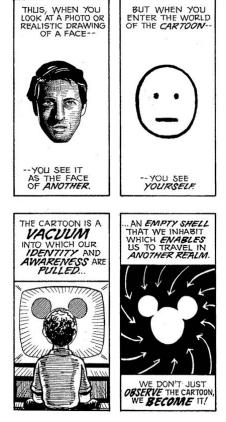
Like Magritte, Korzybski makes the distinction between the signifier and the signified but alerts us to the utility that an abstraction like a map represents.

Harry Beck's redesign of the London Underground train map in 1933 took what was up to that point an increasingly difficult representational challenge, and made it simple. Beck viewed the London railway from a thematic topological perspective rather than a topographical one. Beck's "map organized London (rather than London organizing the map)" (Tufte 2002). By amplifying relevant details and simplifying their representation Beck produced an icon of visual communication upon which similar maps are based upon today. Maps—like cartoons—focus our attention and sharpen our understanding.



London's famous underground rail map demonstrated that—in the right context—graphical simplicity was more important than accurate scale (Beck 1933).

The idea of simplification of reality through icons and symbols is central in understanding the mechanics of why cartoons can communicate so effectively. Scott McCloud labours this point in Understanding Comics, opening a chapter with his cartoon reflections on Magritte's pipe. He then shows us how through graphical simplification of the real world, meaning becomes universal. We become more engaged, more able to relate to and comprehend phenomena represented in the image, "we become it!" (McCloud 1993, p.36).



The universality of symbols is a powerful tool in cartooning.83

To draw a satirical, political or analytical cartoon requires intellectual effort, critical reflection, familiarity with the subject matter and an ability to isolate important details. A successful cartoon provokes us to ask questions and consider an issue beyond face value. To draw it is to understand it, to become it.

<sup>83</sup> Panels from Understanding Comics (McCloud 1993, p.36).

Drawings, sketches and cartoons; whatever we choose to call these visual renderings, they can be viewed as evidence of our thinking, as compact parcels of our knowledge and experience.

Whether they are just fanciful whims or insightful analyses, drawings are imbued with our internal response to the outer world – they are our questions and our answers. To draw what we understand, what we see in our 'minds eye' is to perhaps engage in mapping aspects of our mind. By 'taking a line for a walk'84 not only do you make your own discoveries but you also leave a path for others to share your journey, your insights.

A PICTURE IS WORTH A THOUSAND WORDS. AN INTERFACE IS WORTH A THOUSAND PICTURES.85

> When Ben Shneiderman proclaimed, "A picture is worth a thousand words. An interface is worth a thousand pictures", he was describing computer interfaces for exploring large data sets in computer aided visualization of quantitative information (Card, Mackinlay & Shneiderman 1999). He was essentially saying that a well-constructed interface is able to simplify complex information, provide a means to navigate the information and in turn act as an efficient conduit for creating meaning.

In a similar vein, Edward Tufte (1990, 1997, 2001, 2006) has explored in detail the field of information graphics that more broadly includes visually representing knowledge and qualitative information. Tufte argues for graphical simplicity, efficiency and truthfullness with maximum impact whenever representing data and information.

Whatever the kind of visualisation, the ultimate goal is to not only represent information in the most economical and communicable means, but to also facilitate learning and comprehension. Well-crafted visualisations and

A expression attributed to the modernist artist Paul Klee.

<sup>&</sup>lt;sup>85</sup> Ben Shneiderman (Card, Mackinlay & Shneiderman 1999).

information graphics simplify complex, abstract or impossibly large amounts of information. They reveal patterns or hidden associations and accentuate important differences (Tufte 1990, p. 65), they help filter meaningful knowledge from 'noise'.

COMPLEX CONCEPTS BECOME MORE EASILY DIGESTED WHEN REDUCED TO IMAGERY.86

> SketchyTruth is more than just a means to draw cartoons. It is an exercise in graphical interface design and information graphics, it is an attempt to analyse, visualise and simplify news information. It is a navigable collection of cartoons, but it is also an aggregation of the information encoded in the cartoons; the metadata. The interface will highlight issues of significance, reveal differences and minimise visual clutter (Tufte 1997, 2001). It will provide a rich alternative to commercial news media and amplify the aspects of the news that resonate the most with the community.



<sup>(</sup>Eisner 1996, p. 5).

# Opening the Black Box and wrestling complexity

Drawing cartoons can help us open the mysterious 'black box' of the news media machine to see what is really inside.

Borrowing from Actor Network Theory (ANT), in SketchyTruth there is an object-centered sociality in which the activity between news, cartoonists, taggers and commentators form the actor network. The primary social objects—the news and cartoons—are the nodes in the network.

THE SOCIAL OBJECT, IN A NUTSHELL, IS THE REASON TWO PEOPLE ARE TALKING TO EACH OTHER, AS OPPOSED TO TALL-KING TO SOME-BODY ELSE.<sup>87</sup>

News in SketchyTruth should be viewed as a malleable social object where narratives around news-meanings can develop from multiple perspectives. News acts as both a catalyst for conversation and the hub around which conversation forms, drawing people together through shared interest. A social object is the thing—the object—that someone wanted to share, or that a community finds itself spontaneously sharing. Social objects are the things that we all gravitate toward in our social communities, which we discuss and share because of some commonality. It might be a news clipping, or a cartoon stuck to the fridge door at home or pinned to the office noticeboard. Social objects act as nodes and hubs in social networks and participatory media.

THE INTERESTING THING ABOUT THE SOCIAL OBJECT IS THE NOT THE OBJECT ITSELF, BUT THE CONVERSATIONS THAT HAPPEN AROUND THEM.  $^{86}$ 

<sup>&</sup>lt;sup>87</sup> Hugh MacLeod (MacLeod 2007b).

<sup>88</sup> Hugh MacLeod (MacLeod 2007a).

In terms of ANT, social objects are the actants, static things with potential. The cartoons become lively actors once they are connected into the network through the linking, tagging and commenting activity of other participants. A single cartoon in isolation is an image without an audience—a node without links—and is merely therapy for its creator, despite being an object of meaning. These same cartoons become 'super-charged' social objects of meaning once they become enmeshed into the network, realising their communicative potential. Embodied in any cartoon—in response to the news—is meta-information, crafted by the cartoonist through the process of metaphor and visual simplification (McCloud 1993). This layer of meaning is amplified the moment a cartoon attracts attention of interested SketchyTruth participants and in turn, generates further sharing activity. Like any rapidly spread Internet meme<sup>89</sup>, a cartoon is tagged, shared and copied until the concept of the original cartoonist rapidly spreads through the network.

There are important differences between the traditional broadcast/print model of news propagation and the way newsworthy ideas travel on the Internet. In the absence of the Internet, broadcast news is communicated via a centralised authority in a passive, controlled 'one-to-many' transmission and is limited as a social object by the size of any single news consumer's physical social contact group and who they can share that information with. By the very nature of broadcast news, the distribution is limited compared to the possibilities online. While the Internet at its most basic is a mechanism linking one object—or page—at a time, the overlaid mechanisms for searching, filtering, aggregating, copying and sharing permit extraordinary distribution potential through a non-linear and rapid 'many-to-many' transfer of ideas.

In networked information space both the individual's and the group's discretion decides upon the relevance, credibility and news worthiness of any

<sup>&</sup>lt;sup>89</sup> An Internet meme is basically any idea rapidly spread online. The term has its origins in the work of Richard Dawkin's *Selfish Gene*.

idea. Since a social group online can be many factors larger than our face-to-face network<sup>90</sup> and represent a more diverse range of opinion, we can start to get the benefits, not only in terms of what matters in the news, but in terms of which news carries the most truth – thanks to the 'wisdom of the crowd' (Surowiecki & ebrary Inc. 2004).

As with Deleuze and Guattari's "abstract machine covering the entire plane of consistency" (1987 p. 12), in SketchyTruth there is also a level of machine-like complexity that is achieved through a network of relationships between cartoons and the news headlines that inspired them. A virtual refinery, the SketchyTruth 'machine' processes news, ideas and cartoons, filtering the interaction of contributors. What this machine produces is knowledge about the news that is closer to what might be considered the truth and what we might call the 'wisdom of the crowd' (Surowiecki & ebrary Inc. 2004).

To draw a cartoon and to make visible the ideas provoked by the news, is a process of 'actualising the virtual' (Deleuze 2004). In other words, the truth—the actual—that was always present but obfuscated by the mechanisms of the media, is drawn out and revealed. The truth it is actualised through the exploration and refinement of ideas in the news cartoons and the social networks that form around them.

WE SUBJUGATE OURSELVES TO WHAT WE DON'T UNDERSTAND IN ORDER TO USE IT... WE ACCEPT NOT KNOWING WHAT'S GOING ON INSIDE THE BLACK BOX... BECAUSE THE KNOWLEDGE OF WHAT'S GOING ON INSIDE IS NOT GERMANE TO UNDERSTANDING ITS SOCIAL FUNCTION.

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The anthropologist Robin Dunbar revealed a direct correlation between our brain size and the number of people in our physical environment that we can manage intimately. We can mentally juggle around 150 links to people, this is known as the Dunbar Number. Online social networks augment this theoretical limit by providing the tools to keep in touch with many more, although through what are known as 'weak ties' typical of acquaintances. Yet, despite not knowing people in your online social network intimately, they can still help you filter information through their combined knowledge.

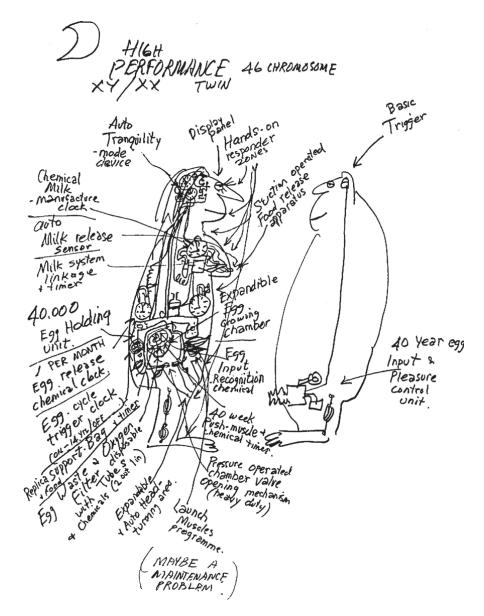
<sup>91</sup> Norbert Bolz (Bolz 1998).

The obfuscation of truth in the news media, and the mystique around the processes of news production—from the perspective of the news consumer—makes it seem like a mysterious black box (Hemmingway 2008). A black box is an engineering term for a device that hides its internal complexity, only revealing its inputs and outputs. A black box is where "many elements are made to act as one" (Latour 1987 p. 131) and we perceive only the whole.

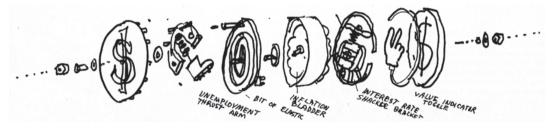


A *Transparent car* may not make the process of driving easier. It may overwhelm us with unnecessary information superfluous to the task of transporting ourselves between locations. All the relevant inputs and outputs of the system are reduced to a simple interface on the dashboard (*Car mechanics desktop PC and Mac wallpaper* 2008).

Complexity forms much of our domestic existence. Our phones, radios, televisions, fridges, computers and our cars; these are all complex systems abstracted and simplified, hidden behind an interface. The interface is a representation of visual and tactile clues, just enough of the right information to help make practical sense of the object.



High Performance 46 Chromosome XY/XX Twin (Petty 1986). This portrayal of a complex female 'contraption' makes a sexist joke meaningful.



Cashflow: Care and maintenance [detail] (Petty 1983). Bruce Petty reminds us that money is complex and that its value and meaning is determined by many components.

Money, the economy, society, religion, politics, the media; these are just some neat labels for the complex systems, processes and institutions of which we have different—perhaps limited—understandings. Concepts like these are far from simple, concealing a level of detail and complexity that a few words alone cannot sufficiently describe.

Cartoonists like Bruce Petty have spent a lifetime prying meaning from these social abstractions, helping to make their properties visible. For Petty, the world is a "very very complicated organism" (Adams, Leak & Spooner 2009). His cartoons of reified social mechanisms sometimes appear as disassembled machines, as if he has removed the screws to reveal the insides:

Petty's unruly pen traces the deep and unexpected interconnections between things to reveal the inner workings of the world (Petty & Radcliffe 2008).

Simplification should be a good thing, but the news media can oversimplify, as Charlie Brooker wryly points out:

When it comes to complex issues such as the economy, there are a billion differing points of view, and the only thing that can be said with any certainty is that there is no certainty whatsoever. The news doesn't like this kind of ambiguity one bit, of course, and tries to break everything down into an exciting two-sided mud-slinging match that helps no one (Brooker 2009).

This idea of reification—and the use of metaphor—is useful in thinking about the purposeful abstractions and simplifications we make of our world in order to understand it better. In our need to simplify we often refer to complex systems as if they were tangible entities, rather than the combination processes and parts from which they are composed (Johnson 2000).

"Simplistic media coverage" (Altheide 2009, p.6) using catchphrases like 'the war on terror' oversimplify the concept of terrorism, loading it with a bias in favour of the 'war maker'. Yet terrorism is,

susceptible to the relativism of situations and actors... The spectators, victims, and terrorists themselves become encapsulated in a reified consciousness. When reification occurs,

the fundamentally social nature of an act is masked by an artificial objectivity (Greisman 1977, p. 303).

While expressions like 'the war on terror' makes catchy news headlines, they bring us no closer to a common objective understanding of the word terrorism in the wider context. Reified concepts like these highlight the tendency of the popular news media to oversimplify and generalise complex social issues, often at the behest of prevailing power structures, and often at the expense of the truth.

My objective with SketchyTruth is to move toward creating a more 'transparent box'; deconstructing reified concepts and institutions in the news, in order to make the inner-workings visible. It is the interface design—and the cartoonists' scratchings on the surface where user-interaction occurs—that will "shed light upon the darkness of the Black Box" (Bolz 1998). Cartoon drawing will provide the primary lens through which we can re-imagine the news.



# Cartoon confectionary and Petty contraptions

HE RE-INVENTED THE WORLD AS A VAST SCRIBBLY MACHINE WITH INTERLOCKING COGS AND LEVERS THAT CONNECTED PEOPLE IN WHOLLY LOGICAL BUT UNLIKELY WAYS.<sup>92</sup>

The institutions and complex systems portrayed in the cartoons of Bruce Petty often use the metaphor of a 'machine' or 'contraption'. Petty is one of Australia's oldest practicing editorial cartoonists and has been applying his wit and economical black lines to the news and current affairs since the early 1960's. Petty uses metaphors of machines and contraptions to help explain his observations of the complex way people and institutions work. His sketchy contraptions seek to give form to the big slippery ideas in society:

Caricature is a device by which we hope to make complex ideas (at least) accessible, (occasionally) witty and (sometimes) informative (Tudball 2003, p. 3).

HE ALWAYS LOOKS AT LINDERLYING IDEAS, AND MANY OF HIS FILMS AND HIS DRAWINGS KNOWN AS PERAMBULATIONS ARE ATTEMPTS TO PUT TOGETHER AN IDEA, OR TO CONFIGURE AN IDEA—TO MAKE IT INTO A MACHINE—THAT YOU CAN LOOK AT AND PLAY WITH.<sup>93</sup>

On a few occasions, I was privileged to work alongside Petty, most notably on a small online project called *War and Peace*, 1999 (Appendix B). This experiment is where my interest in the visual representation of news information through cartoon in digital interactive media began. Witnessing Petty's approach to exploring difficult social issues through his cartoons, it was apparent to me how effectively complex ideas can be conveyed through the simplest of means.

COMBINING HETEROGENEOUS PARTS AND COMPONENTS...
IN WAYS THAT PUSH BEYOND THE BOUNDARIES OF THEIR
ORIGINAL CONTEXTS... TINKERING IS A WAY OF INVESTING
NEW MEANINGS IN THINGS.<sup>94</sup>

<sup>&</sup>lt;sup>92</sup> Martin Flanagan quoted in the The Age newspaper online (Flanagan 2002).

<sup>&</sup>lt;sup>93</sup> Phillip Adams (Adams 2009).

<sup>94</sup> Alex Pang (Pang 2008).

Petty is a classic tinkerer, visualising contraptions as if drawing blueprints for machines that could never exist. Yet, on occasion he has managed to turn some of his unselfconsciously scribbly metaphors into functioning three-dimensional objects. Finkering helps give form to "decontextualised knowledge" (Brown 2008) by playing with information and playing with knowledge creation.

Petty's images are also excellent examples of Tufte's visual confections:

...an assembly of many visual elements, selected... from various Streams of Story, then brought together and juxtaposed on the still flatland of paper. By means of a multiplicity of image-events, confections illustrate an argument, present and enforce visual comparisons, combine the real and imagined, and tell us yet another story (Tufte 1997, p. 121).

The ability of the comic format to describe overlapping elements of time and space through visual confections in this way "make reading and seeing and thinking identicial" (Tufte 1997, p.151). These confections:

...bring images together to display visual information, often expressible in words and often derived from words. Confection-makers cut, paste, construct, and manage miniature theatres of information (Tufte 1997, p.138).

The complexities of human society that Petty tackles are reflected in his sketchy drawings, cartoons and animations. In Petty's cartoons are embedded a multitude of readings and references—no doubt the result of extensive reading—that try to respect the breath and depth of an issue. Often attempting to relate the connections and associations between parts like a mental map or machine, Petty is the "thinking person's sketch symbol" (Baker 1989). Both the macro and the micro view are represented in Petty's contraptions illustrating a collision of historical events and concepts not always in an obvious order:

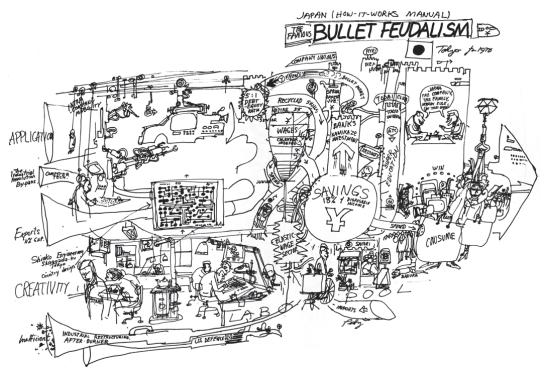
[Petty aims] to draw process rather than gags or tableaux... to be read as well as viewed. You read [Petty's cartoons] as a

Despite being well known for his cartoons, Petty is also a writer, filmmaker and sculptor. *The Creativity beam* is one example of his sculptural pursuits (Petty & Staff-of-the-Powerhouse-Museum 1988).

metaphor for complex cultural and political processes rather than as a comment on a particular event (Phiddian 2004 p. 28).

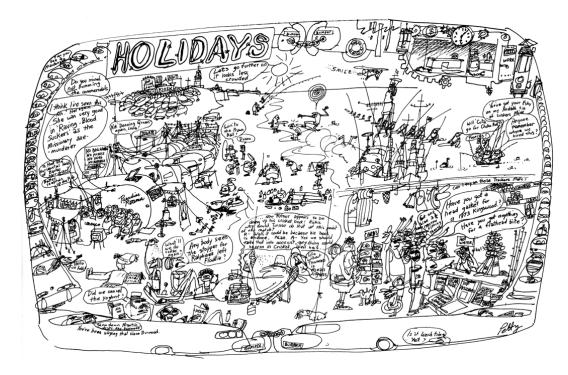
THE COMPLEXITY OF PETTY'S TWISTING LINES AND MEGALOMANIAC FIGURES AND GROTESQUE BUREAUCRATIC ENGINES SWALLOWING THE MASSES' HOI POLLOI GOES FAR BEYOND A SIMPLE REREADING OF POLITICAL TEXT. \*\*

Similar to Tufte's *mapped picture* a cartoon can function simultaneously as 'evidence and explanation' of phenomena (Tufte 2006). The following Petty cartoon confections demonstrate this.

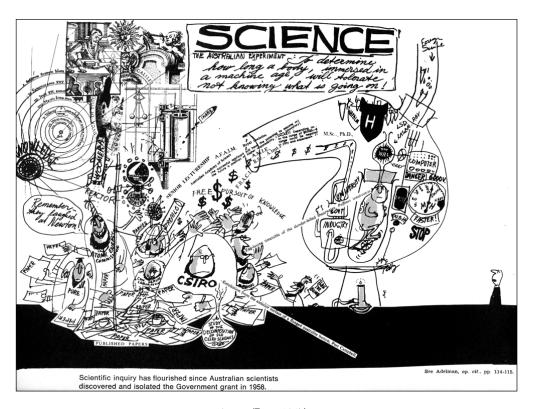


Bullet Feudalism, Japan (how-it-works manual) (Petty 1978).

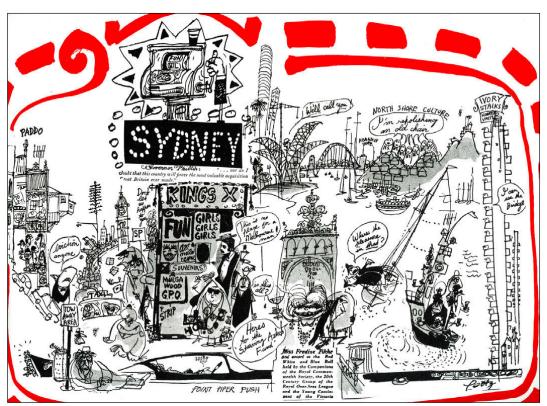
<sup>&</sup>lt;sup>96</sup> Ashley Crawford (Crawford 2000).



Holidays (Petty 1978).



Science (Petty 1967).



Sydney (Petty 1967).



University of Technology Sydney, Bruce Petty (origin and date unknown).

## Particles of truth

And that is how I find particles of truth, not the absolute truth, or the whole truth. And they have to be in all possibilities, including those I never considered before. So there are never complete answers. Or rather, if there is an answer, it is to remind myself that there is uncertainty in everything (Tan 2008).

The "particles of truth" described by Tan highlight the role of uncertainty and ambiguity in the creative process. This is intriguing in two ways.

First, it mirrors in part the awkward trajectories that SketchyTruth has taken in search of meaning and a justification for being. It reflects the eclectic aspects of my thinking, the influences and the inspirations where no one source has felt complete. Instead, there are aspects of relevance—of truth—inherent in most of the material upon which I have based my ideas. Ultimately, SketchyTruth—as the name implies—can only represent some aspects of the 'truth' depending on your perspective.

Second, we can extend the particle metaphor to news stories, especially those small snippets via online feeds, television and radio news headlines. These "particles of truth"—which we can think of as news particles—can also be imagined as digital information packets, shunted, copied and shared across the Internet. While we can't always accept the claims of a news story as absolute—as I have already argued—the fragments of information that make up the news are nonetheless available to us to reinterpret, repackage and redistribute.

The 'media futurist' Gerd Leonhard succinctly describes ten ways to "reinvent print media" in the context of a fragmented news information space (Leonhard 2008). From his list of ten approaches, Leonhard asks news organisations to:

Micro-chunk. Fragment and re-aggregate... Slice and dice... offer a unique and powerful platform for these conversations...

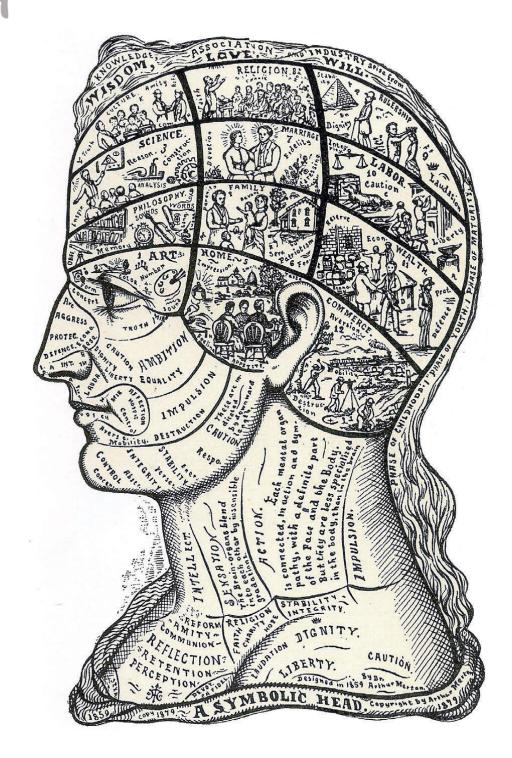
around your content. Aggregate the conversation. Bundle it. Wrap it... Filter. Curate. Contextualize. Inter-connect. Make sense of things. We, the users, need this more than ever and we will pay you to filter for, with and even through us!

What Leonhard describes is a dynamic information economy based on collaboration between the news media and the news consumers to pull apart, filter and simplify what we today experience as a disorientating overload of information. The significant bits of information as 'particles of truth' are then traded, strategically recombined and remixed help us "make sense of things", and as Amy Tan suggests, those particles can carry multiple truths.

SketchyTruth is a platform for news analysis. It provides a collective visual meditation on news fragments, their meaning, context and significance. Rather than overwhelming us, the simple cartoon leaves a trail that can be retraced to singular news objects, original news events and reports. The genealogy of reflection and analysis in SketchyTruth reveals a narrative that cuts deeply into the—once simple—news headline. Each tag, each link to and adaptation of a user-contributed cartoon represents a particle of truth that in totality builds the scaffolds of collective wisdom around a news topic.



## A pathway into tacit knowledge



A Symbolic Head, Arthur Merton, 1879. A phrenological view of the mind and its function mapped out in terms of human traits and endevour (Harmon 2004, p. 25).

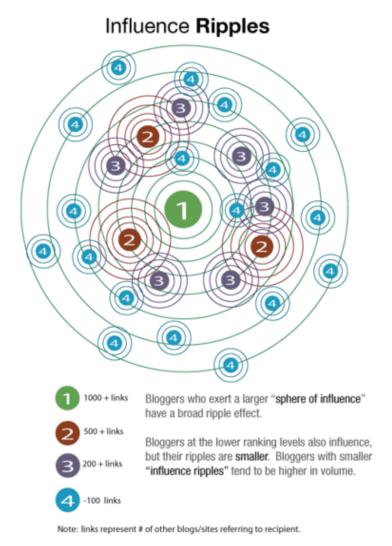
Perhaps we are on the cusp of being able to tap into and utilise the kind of information wrapped up in the "heads of people" where:

> Knowledge exists on a continuum from explicit to tacit. At one end of the continuum is knowledge that can be laid out in procedures, steps, and checklists, - explicit knowledge. At the other end of the continuum is knowledge that is primarily in the heads of people - tacit knowledge (Dixon 2000, p. 26).

While explicit knowledge, like news, is relatively easy to record and convey in any mode of communication, it is the more inaccessible tacit knowledge—that gained from experience—that presents the communication challenge. In SketchyTruth, a cartoon can carry conceptual cues embedded by the contributing artist through visual metaphor and symbolism, emanating from the cartoonists world-view, their tacit knowledge. A cartoon can also carry the explicit knowledge 'spelt out' by the artist through literal visual depictions, and through the attached metadata like tags and annotations.

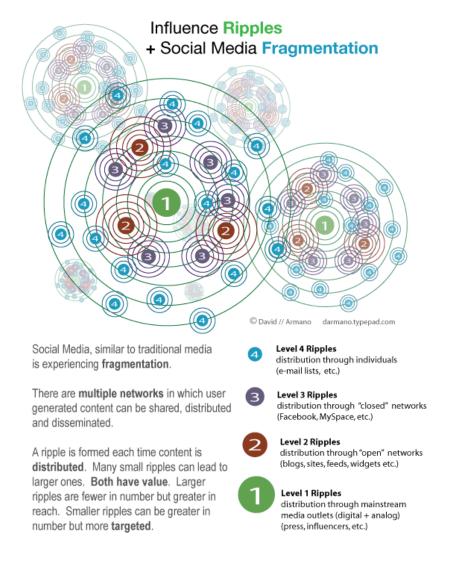
From a more distant view of a social space, viewing it as a complex system, the network of relationships between social objects starts to blur. Where explicit and tacit knowledge begins and ends remains unclear as information shifts and bends through representational and interpretive layers.

The evolving mechanisms around which hyper-connected people interact online and the capabilities of portable, personal smart-devices all afford an unprecedented awareness of the collective mind. Is it possible that by giving form to the ideas inside the heads of people we are in fact making their tacit knowledge visible?



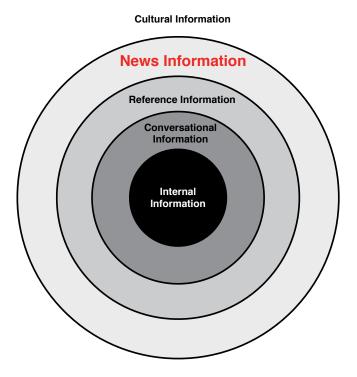
[Figure 1] Influence Ripples, A model for the spread of ideas online (Armano 2006).

David Armano describes information in the context of blogging using the concept of "spheres of influence" and "influence ripples." He represents this with a diagram of the spread of ideas amongst a social community [Figure 1] (Armano 2006). In a later visual explanation, Armano tries to show how distribution channels fragment the information space in social media, because of multiple, overlapping networks of sharing [Figure 2] (Armano 2007).



[Figure 2] Influence Ripples + Social Media Fragmentation, (Armano 2007).

Richard Saul Wurman in Information Anxiety 2 lays out a hierarchical model for the information in our world that "operates at varying immediacy to our lives" (Wurman et al. 2001, p. 160). Five Rings of information describe our internal tacit knowledge as it moves out toward more explicit forms [Figure 3]. News information is not intrinsic, but is instead the kind of information we have to actively acquire through various conscious means.



[Figure 3] The five rings of information (Wurman et al. 2001, p. 160).

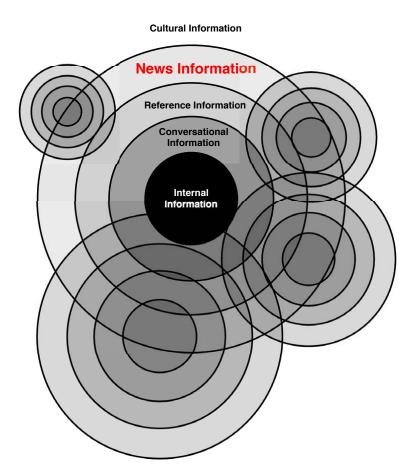
Comparing the influence ripples of Armano's social networks to Wurman's Five Rings of information raises an interesting question. Does the ordered flow of information in this model break down when the way we obtain and interact with our information today no longer follows a simple hierarchy? Wurman could not have anticipated the impact and nature of online social networks at the time he described the convenient onion-layered rings to describe types of information. In the hyper-connected information space that is rapidly evolving, perhaps this model is no longer adequate.

NEWS IN 2010 WILL BLUR THE LINES BETWEEN AUDIENCE AND CREATOR MORE THAN EVER IN AN ERA OF SOCIAL MEDIA.9

> Under a broadcast/consumer system of media, our news information sits hierarchically outside of us as portrayed by Wurman. In a social network, information of all types is enmeshed in conversation. News is no longer a distinct entity on the outside, but is now more fluid. News traverses all levels of experience, flowing in and around the individual from many sources.

<sup>&</sup>lt;sup>97</sup> Vadim Lavrusik (Lavrusik 2009).

Remixing Armano's model of influences with Wurman's structure [Figure 4] we quickly see how news might intersect all boundaries. News is not just at the periphery anymore, but penetrates through all information types. News information in a hyper-connected network has no boundaries. It includes everything in Wurman's model from the internal to the cultural, making the difference between tacit and explicit information even blurrier. Conceptually, with the right tools and interfaces applied to our massively shared information spaces, we might bring into focus tacit knowledge – the stuff buried in the "heads of people" (Dixon 2000, p. 26).



[Figure 4] The five rings -Remixed as overlapping influence ripples.

## Life in the middle zone: Cartoons to navigate intersubjective space

INTERSUBJECTIVITY: PERTAINING TO THE EXCHANGE OF THE CONTENTS OF CONSCIOUSNESS CONCEIVED NOT AS THE ONE-WAY TRAFFIC OF OBJECTIVE KNOWLEDGE BUT AS THE MUTUAL COMMUNICATION OF TWO PEOPLE'S RESPONSES TO EXPERIENCE.<sup>38</sup>

News traditionally is not a conversation; it is more about telling us—the news consumer—what important events have happened. News wears a veil of objectivity in a very subjective world. It is a 'top-down' authoritative way of describing events, it is one way communication. The news itself is not a social thing. What people do with the news is a very social thing: they share it, they discuss it and they have opinions about it. As a social object, the news is something around which conversations take place. The ideas raised by the news are what a cartoonist expresses their opinion on.

In rich social spaces, conversation tends to flow. Well before social media was commonplace online, David Bohm described dialogue in such a way that he might as well be describing online social media:

The object of a dialogue is not to analyze things, or to win an argument, or to exchange opinions. Rather, it is to suspend your opinions and to look at the opinions - to listen to everybody's opinions, to suspend them, and to see what all that means. If we can see what all of our opinions mean, then we are sharing a common content, even if we don't agree entirely...

It's not like a mob where the collective mind takes over — not at all. It is something between the individual and the collective. It can move between them. It's a harmony of the individual and the collective, in which the whole constantly moves toward coherence. So there is both a collective mind and an individual mind, and like a stream, the flow moves between them. The opinions, therefore, don't matter so much. Eventually we may be somewhere between all these opinions, and we start to move beyond them in another direction — a tangential direction — into

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<sup>&</sup>lt;sup>98</sup> The curator, *Space Odysseys* (Alexander 2001).

something new and creative (Bohm, Nichol & ebrary Inc. 1996, pp. 26-28).

I would also extend the metaphor of dialogue to the act of drawing. Whether you are 'talking' yourself through a problem with your drawing, or whether you are drawing in order to communicate with others – it is through a shared dialogue that understanding, and perhaps truth, emerges.

Unlike the broadcast 'monologue' of news, a distributed online conversation draws out what we would otherwise not see in isolation "because new ideas usually come through conversations, and the web is a mass of conversations" (Leadbeater 2008). The common term "news feed" reinforces the idea of a oneway information flow and conjures up a vision of the acquiescent individual as news consumer—or 'feeder'—accepting what commercial media put on the table. Perhaps in the future we will describe our sources as 'news exchanges' as we engage in a collaborative process of news gathering, filtering and sharing. We should think of news as:

> A continuous rolling event, incorporating many aspects and points of view, serving as a site for a moderated collaboration with sources and audiences (Simons 2009).

This concept of the news seems more faithful to the 'real-world' where newsworthy events unravel over time; where facts are uncovered or debunked at various stages, and discussions occur, opinions change and perceptions evolve. News like this has a history and a life, and it has a shelf life. News if it matters, remains a dynamic conversation, welcoming opinion and taking into account new developments and contexts.

Describing images in the context of information visualisation, we can reflect on the "middle zone", a space that spans real world experience and imagined possibilities:

> ...it is precisely these unseizable images—unlike delusory "clear and distinct" words or "reliable" numbers identified with reason—that, paradoxically, do not lie. As kinetic, probable, and interactive forms of expression, they openly attest to the

conjectural and fluid nature of life lived in the middle zone. They help us to organize and make sense of that floating world, or milieu, stretching considerably below certitude and somewhat above ignorance (Stafford 1996, p. 39).

The middle zone is where our increasingly visual culture is thriving on the Internet, where information—and experience—are in flux. Visual imagery becomes interactive and hyper-connected as communities of sharing grow. This occurs whether images are representing things we might buy on eBay or acting as rich social objects on the photo sharing website Flickr. If we consider our dependence upon the visual interface to navigate information, then these images in the middle zone dominate – acting as visual signposts, metaphors, symbols and icons for meaning. Images in this way become tools for making sense out of the complexity, social variance and uncertainty in the networked online information space. In a digital world of conjecture, confluence and confection, a world of intersubjective and relative truths, the visual image is our guide and beacon.

The act of drawing similarly is a struggle with the real and imagined as we attempt to give form to the expression of an idea. Using drawing as an analytical, abstractive device, the drawing becomes an amplifier of meaning for ourselves as we seek to simplify complexity (McCloud 1993).

Skilled cartoonists are adept at amplifying socio-cultural concepts. The Geoffrey Hook cartoon that follows explores the Australian Republican Movement and national identity through the metaphor of a 'Republican Beach'. The cartoon operates on a number of levels. It is a reference to the debate over a new flag for the republic as well as the struggle of Aboriginal Australia to be recognised in the process. It plays with the Australian identification with sun, surf and lifeguards. It may also signify the raising of a flag when a territory is claimed by new arrivals, just as the British colonialists did arriving in Australia, on a beach, for the first time. The colonialist claim was made with disregard for

those original inhabitants who had arrived around 50,000 years earlier. The "middle zone" here, is the intersubjective space between the flags.



Geoffrey Hook's cartoon invokes multiple layers of meaning (Hook 1998).

News media has evolved to dominate the objective space of mass information distribution. The middle zone that SketchyTruth inhabits is the intersubjective space occupied by cartoons, beyond the reach of broadcast news:

> It is an intersubjective world of culture, consciousness and purposive action, in which relationships are organized through the ideas, values and interests of members of society, producing human action and interaction. With this comes a politics of critical, relativistic enquiry into society (Seale 2004, p. 36).

The middle zone is the place where socio-cultural dependencies and information contexts are part of the dialogue between cartoonists and their audience. The middle zone represents a move away from the explicit superficial and objective nature of news information and a move instead toward the subjective and tacit understandings of shared experience. The illustrated world of SketchyTruth is where shared meanings are constructed interactively between participants. Through the combined efforts of citizen cartoonists to dissect, analyse and visually communicate ideas inspired by—and provoked by—the news, we gain a better understanding of ourselves.



## Drawing it together

#### The sketch

SketchyTruth is a concept for a drawing application on touchscreen mobile devices (smart-devices) to explore through user-generated cartoons the hidden 'truths' between news headlines.

SketchyTruth is a small act of online activism and a contribution towards redressing what is an information imbalance. It is a way to localise and contextualise the news from an individual perspective. It aims to disrupt the flow of misinformation and to reclaim ownership of what was always public information.

Citizen cartoonists sketch, scribble, doodle and comment about the news on an expanding canvas of opinion, drawing inspiration from news editorial cartooning and citizen journalism.

As representations of the 'facts', headline news comes to us as a montage of information fragments. The cartoons in SketchyTruth will act as clarifying visual notes for what prospective users might regard as under-reported or over-simplified mainstream news reporting. Over time, a layer of metadata will surround the cartoons, adding further—perhaps alternative—meanings. By aggregating the affective response to the news visually, the global news-mood becomes visible. More than just another way of consuming the news, this proposal is for a visual platform to collaboratively reflect upon the news and its social effects.

Newsworthiness is relative, relying upon an individual's context and their point of view. What is important to you, or important to me, does not always mirror what the news media decides is important on our behalf. News is

contextual, transient and subject to bias and manipulation. As a result, the news on occasion engenders an air of uncertainty or distrust because of 'sketchy' details.

In response, SketchyTruth seeks to leverage the power of distributed knowledge and harness the collective wisdom of its participants in reconstructing a different—perhaps better—picture of the news. I have set out to explore the potential of 'hacking' into, and interrupting the global news information stream by handing some editorial power back to the individual to reinterpret, remix and repackage the news.

### The frame

Throughout this exegesis, I have examined ideas resonant with the development of a mobile cartooning application like SketchyTruth. I have reflected on the nexus between participatory design and the use of cartoons as a way to navigate news information and the quality and credibility of news media. These are just a few of the theoretical perspectives that a project like SketchyTruth conjures up.

While I do not personally subscribe to the idea of absolute 'truth', I have suggested that with the help of many diverse and independent minds (Surowiecki & ebrary Inc. 2004) that we can collaborate in the dataspace proposed by the SketchyTruth concept. We can collaborate in exploring the news and together as citizen cartoonists—we can seek the hidden truths between the headlines.

In visual confections where the whole is much more than the sum of its parts, an aggregate visual interpretation of the news may actually help us see the issues beyond the headline more clearly. Through minimalism and efficiencies of graphical ideation, cartoons as a communication medium can "make reading and seeing and thinking identical" (Tufte 1997, p.151).

I have suggested that drawing, sketching, diagramming and making cartoons can help us peer into the mysterious 'black boxes' of the news media, making hidden or discarded information visible. With citizen cartooning we can decode important ideas reified by Newspeak<sup>99</sup>.

Cartoonists like Bruce Petty demonstrate that by taking a metaphorical scalpel to the news through playful visualisations and imaginary contraptions, that we can unveil the subtexts of mediated information.

Like a butcher's knife, a cartoonist's sharp wit can cut swiftly to the bones of reportage laden with public relations and political spin. A well-crafted cartoon is able to dissect matters of public importance and lay the heart of an issue on the table for all to see.

The form that images take in a "global informational networked society" (Manovich 2004) might just be that of cartoon images. Cartoons are empowered images, and are centrally positioned to act as our ciphers and decoders across all cultural and language barriers, both online and offline.

The ideas of McCloud (1993) and Tufte (1990, 1997, 2001, 2006) have heavily influenced the thinking behind SketchyTruth. Their ideas have inspired me to speculate on the potentials I believe exist at the intersection of news, cartoon, maps and the computer interface. My primary assertion is that by reframing the news through cartoon drawing in an interactive and social context, we can uncover meaning in the news in ways that existing forms of news transmission cannot.

<sup>&</sup>quot;Newspeak is ambiguous, euphemistic language and expressions used in the news. Reified concepts used by politicians and the media include: 'the war on terror' and 'weapons of mass destruction' often stated as WMDs. I am also alluding to the minimalist language of totalitarian rule in George Orwell's novel 1984. Learn more about Orwell's Newspeak here <a href="http://www.newspeakdictionary.com/">http://www.newspeakdictionary.com/</a>>.

SketchyTruth will be an open platform for scanning the spectrum between good news and bad news. I believe that through the lens of the hyper-connected citizen cartoonist, an alternative view of the truth can be drawn into focus.

### The future

In my introduction, I made clear the limitations of my independent development of an application as complex as SketchyTruth. Without the resources that projects of this nature demand, I have had to frame my creative objectives in terms of a concept pitch, mockup, video simulation and storyboard. These creative artefacts have been developed both in proxy for the 'grand idea' for the purposes of this degree—and intentionally as material that will be used to attract development funding. While this is as close as I can get without actually building the SketchyTruth application, it is the necessary beginning.

Without a functioning application, ideas put forward in the exegesis cannot be tested. They remain assumptions and assertions until a real cohort of participants can draw and interact on their mobile devices. Beyond that, the value of a visualisation and database proposed by SketchyTruth is dependent on massive quantities of actual user-generated data. Until SketchyTruth is real, one can only imagine the possible insights and patterns revealed through the extensive, long-term global participation of citizen cartoonists.

Do you find yourself contemplating the space in between the good news and the bad news? Do you feel the need to draw out meaning from the events in your world that concern you most? Do you wish that someone would explain a complex issue to you, simply and visually? There might be an app for that!



(Apple App Store banner graphic 2011)



## Appendix

## A: Design directions

#### Audio recording transcription with my research supervisor 26 July 2006.

Supervisor's comments appear in small bold.

...Its simply a display system, it is a mechanism that takes streaming news headlines and lets a person basically classify those headlines based on how they feel - mapping affective emotional responses to the news headlines.

...Its a mapping process, a contextualising process, it gives a different perspective, it plays with the whole idea of mapping. It is about point of view on news headlines where context is everything.

[In terms of keeping an interesting headline active] ...the news headline takes on a 'life' based upon the discussion around it. What you have to do is freeze those news headlines long enough for people to be able to respond to them, and for other people to be able respond to that response.

... I fell that the popularity based approaches in many news aggregators is counter to the ideas behind 'The wisdom of crowds' - in that you need people to be acting independently - otherwise they are reacting to 'group think'

... May be by keeping the implementation and visualisation simple, the concept might be more apparent, have greater affect compared to the alternative of cramming ideas in that compete, create contradictions and in terms of interface create too many options that hinder effective use of the 'device'.

...What is a map? What are you mapping? A map is 'not the territory' it is a representation, a point of view, an abstraction that as soon as you have

committed to it and it is fixed – it is no longer accurate! So you need something that is continuous and fluid... that renews itself in response to the needs of the changing information and views upon it.

... The exeges is can be those things that out of all the ideas being explored, keep coming back to me...like the fascination with Bruce Petty's mechanical conceptual 'maps' and how they might be animated and turned into dynamic, responsive, adaptive mechanisms (cartoons).

SUPERVISOR: That must be a real challenge for you, trying to deal with ways of visually representing this yet also finding ways to describe this in words... It is about creating your own critical lens, to suit your individual (creative) vision.

Filters; navigation systems, classification, tagging, are all about trying to get meaning from masses of information by restricting the view and avoiding information overload (which comes with the cost of losing information through the compression process)

SUPERVISOR: It is a proposition you're making...it is a way of redressing this imbalance of information control and reclaiming whats meaningful at a local level. As a proposition you must first ask why do you feel that this is a valid way of going about the exploration, and then has it worked, what does it tell me now, do I continue in this way?

It is a reaction to a world where we see information is manipulated - at what point is it accurate?

It is a response to more recent online developments in the shift from closed/gated online information spaces where the information is static (the read web) - toward more open, socially accessible and negotiable information space (the read/write web).

SUPERVISOR: There is no simple this or that – it is all the spaces in between where 'truth' lies...

The editorial cartoon is so tied to its time-based context, such that readings historically could be quite different from the original circumstances under which

it was penned and received. There is an immediacy of interpretation dependant in most cases upon the freshness of events, references and the reportage.

You have a to come up with a way to restrict yourself technically when faced with a medium that provides for so much possibility. You need to limit the scope for expression so that you can focus on the ideas expressed themselves, not the technique. This is hard in digital media and takes a conscious effort - not just to effectively apply constraints on your self but also to work in a way that embraces anomalies and allows them to be part of the work as a record of the process (think of Rolf Harris with his classic broad house-brush and paint-roller expressions). By limiting the size of the 'digital canvas' in this case only the most important elements can be part of the interface.

I admire Bruce Petty as the antithesis of my own working habits and perfectionist tendencies. As an editorial cartoonist, he is able to-he has to-work quickly. His rough linear style and the confined format means the focus is on the idea. Of course, the life of a cartoon in the newspaper is largely very brief (a day) so the investment in graphic treatment is not worth the time invested compared to getting a point across and/or making a clever joke/satire.

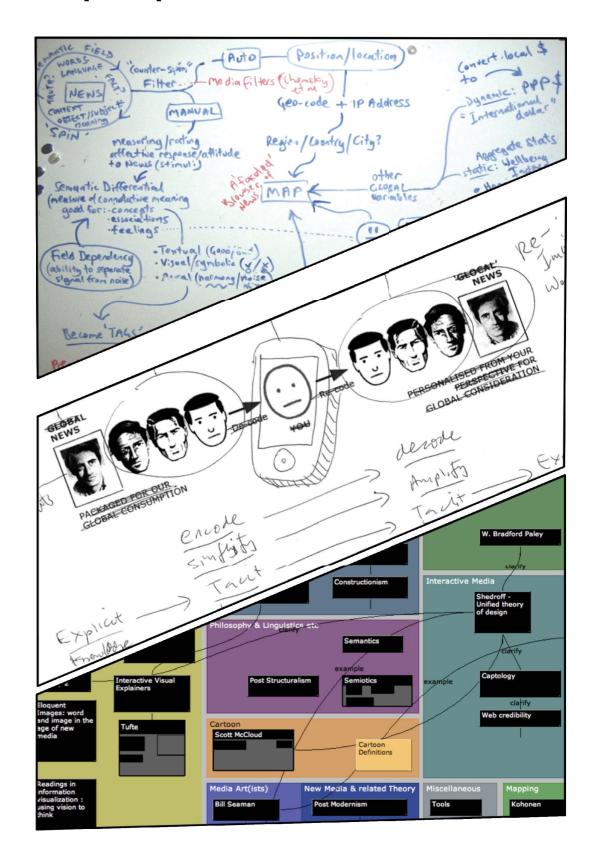
It is exposure to Bruce's cartooning process, and the insights into his multilayered constructions that got me into the DCA in the first place. I was attracted to the idea of the 'magic' that takes place in a cartoon like Bruce's which to me seems to embody a potent communicative element and in particular an economical one. I wondered whether there was something there to be borrowed and applied in the online interactive media environment - comparing literal graphic compression technologies for Internet transmission to a form of 'intellectual' or 'idea' compression that takes place in the cartoon frame to deliver sometimes complex and informative messages with minimal overhead.

It is minimalism in execution of this work that is important. Decisions on interface mechanisms (sliders, controls), colour choices and all the other aesthetic decisions require careful thought. This is because beyond appearance the work must communicate its purpose as quickly as possible, it must due to the exhibition environment online make sense in the short time it is exposed to a web audience. In addition, things such as colour choices have meanings that vary globally. Apart from visual clarity, choice, or rather too much choice in interacting with the work can have negative consequences (signal-to-noise ratio, Tufte's 'chart-junk' etc).

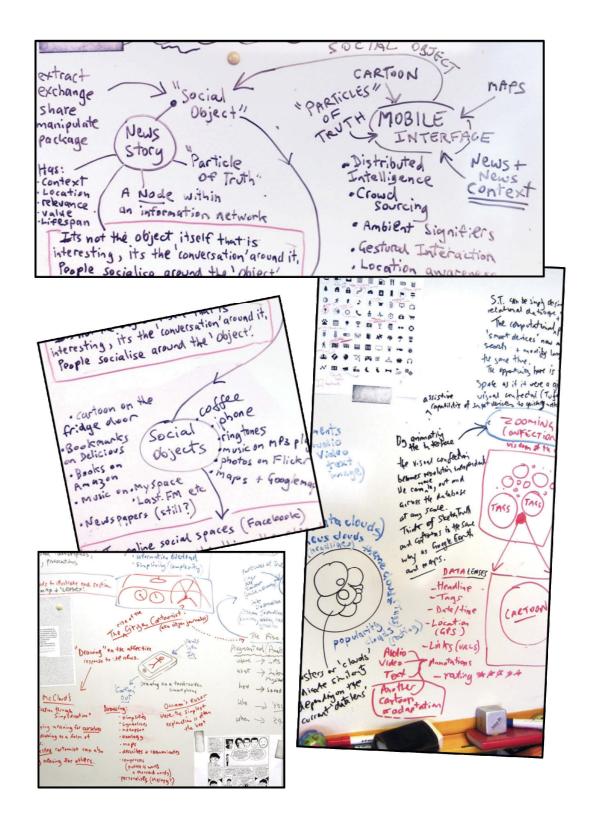
Validity, proof, supporting evidence etc, these have been abandoned in this work in favour of making a generalised statement that raises questions and facilitates debate on what news headlines actually represent, how they might be interpreted and how context is so relevant to meaning. Initially I became overly concerned with justifying my ideas through the use of recognised statistics in the work, but I now realise that an approach like that reduces the expressive qualities turning the project into a reference tool rather than an artistic expression. In fact, I've been afraid of taking a creative risk. I've not been confident to simply place my opinion on display for fear of judgement and criticism and responded by thinking using other peoples' 'evidence' in the form of these global statistics would justify my position. I now realise that the important thing for me is the expression of the idea, regardless of whether it meets anyone else's prescribed standards. In terms of self-confidence, the biggest challenge has been locking myself down to the specifics of implementation, as this is the point where my thoughts become visible for criticism. Even more frightening has been committing to visuals, knowing this is a point we make our first assessments/judgements of a work.

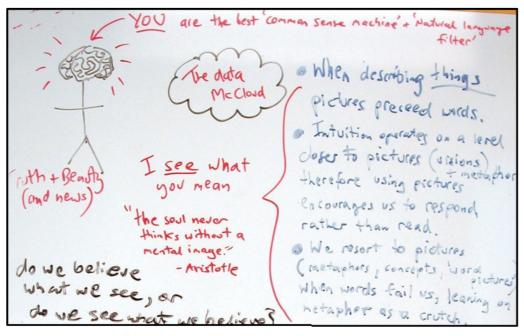
SUPERVISOR: It is not about getting it 'right'. It is about being heard and having something to say... "showing your hand". Accepting intuition and intuitive insight as a valid part of the process as much as hard evidence and academic enquiry...

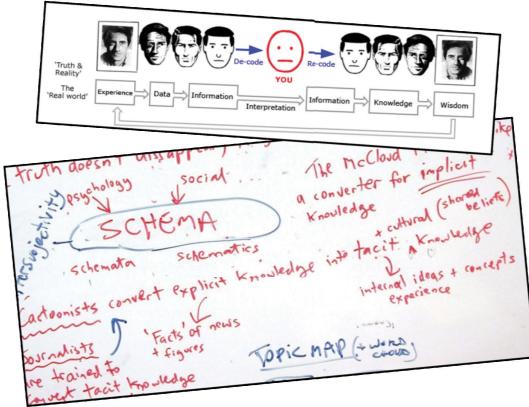
#### Concept development (notes and sketches)











## B: War and Peace: Stuff-Art99 Online interactive cartoon

<a href="http://www.abc.net.au/arts/stuff-art/stuff-art99/war.htm">http://www.abc.net.au/arts/stuff-art/stuff-art99/war.htm</a>

Project team: Bruce Petty Andrew François Mason Petri

*War and Peace* (1999) is the original starting point for this DCA and SketchyTruth. Out of this project came all the questions—and some of the answers—represented in SketchyTruth.

#### Synopsis Short

A Bruce Petty cartoon comes to life in an exploration of humanity's apparent disposition towards violence. The basic idea is that peace is not a natural condition but requires constant monitoring and imaginative, ongoing effort. Live news headlines give the contraption an alarming measure of relevance. Your task: to ensure you make peace as interesting as war.

#### Synopsis Long

This experiment is a light-hearted interactive exploration of the heavy subjects of war, peace and conflict resolution.

You are confronted by the concept that there is a basic dominant human disposition towards violence. Peace is not a natural condition but requires constant monitoring and imaginative, ongoing effort.

Your aim is to avoid war - adjusting the diplomatic valves applies pressure to get the 'Crisis Gauge' moving, ideally towards peace.

Two generic characters at the top of the contraption respond to the present state of conflict, reflecting the level of the 'Crisis Gauge'.

Current news headlines, live off the web, give the War & Peace machine a measure of relevancy. Real background data on countries featured in these headlines can also be viewed.

War & Peace proposes that for peace to become a natural human destination it must become, by some major attitude shift, as interesting as war.

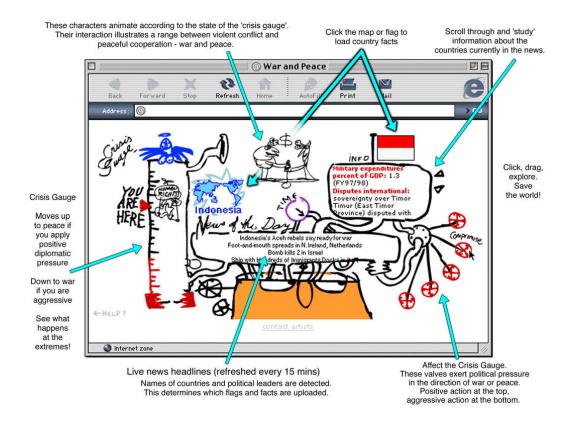


Still frame: War and Peace (Petty, Francois and Petri 1999).

Out of the head of Bruce Petty, the internal world of the mind is opened up through a mechanical metaphor to show how it is our worldview that shapes the political world and determines our fate in war and peace. News is portrayed as a barometer of social conditions and an indicator of global political relations.

Bruce has always used a mechanistic approach when describing complex systems and in War and Peace, we exploited this mechanical view of human relations by simplifying social action down to 'physical' controls (valves and gauges) that were synonymous with real world actions. As you play with the interface, it as if you are manipulating the perceptions and motivations within the 'symbolic head', at once a symbol for you, me and everyone in the world. Ultimately War and Peace is a mirror that reminds the participant of the power, control and ultimate ethical and social responsibility that lies with every individual to affect change in the world.

The process of activating the 'human rights' gauge in War and Peace parallels the voting systems used in social news website to raise or lower the prominence of news stories by voting up or voting down news stories. Tag-like words—action words—when activated through a set of dials affect the upward or downward movement of the 'human rights' gauge. These tags represent progressive or regressive actions; they are a 'vote' up or a 'vote' down.



The use of news headlines was an attempt to contextualise the overwhelmingly violent state of the world. Headlines were scraped news websites and framed within the interface. Interestingly the content of the headlines seemed at the time to be predominantly about global social conflict and disagreement. Not much has changed. Bad news is the news.

My interest in the news as a barometer of social conditions and indicator of global relations has stayed with me into this current project. This time though the focus is on the news itself as a source of information and its global social affect. Uneasy with simply taking news headlines for face value, this time I felt it important to examine the information news headlines contain and ask questions about truth, validity and credibility of the centralised and controlled views that the headlines propagate.

Again, in context of a global system the individual news consumer is empowered this time to directly 're-filter' the news headlines and interrupt the propagation of edited information, which under normal broadcast models flows unchallenged. The aggregated news headlines we will see in this project are those, which the audience have classified and deemed to be of personal importance. The transient, impersonal, quickly-forgotten quality of the news is bypassed and we are encouraged to engage more closely with the real situations and events the news information 'objectively' refers to, and this time to personalise it.

The headlines that participants in the work recognised as important are tagged with a generalised emotional rating, and become a permanent part of the work through a database and visualisation. By visually recording the affective qualities of the headlines we make a statement about the news information that matters to the news consumer – although not necessarily the news information that has most value, but that's another investigation. By locating these responses on a map based upon geographical location of the participant we may see patterns emerge that reveal something about 'real' people's perspectives and relationships to events that edited, packaged, centralised and often monopolised news sources hide.

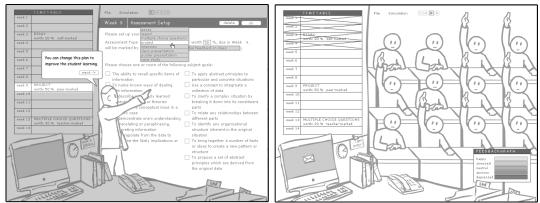
It would be possible for instance to visualise the news so that the same news headline carried distinctly different meaning and consequence depending on where you are in the world. It is about accepting the meaning that comes from information as a relative thing and not absolute. Your proximity to a news event, its effects as well as the conditions you exist in and the relationship you have to the rest of the world call into question the idea of news as 'fact'.

# C: SimAssessment (2005): virtual classroom and student assessment simulator

An Online classroom simulation for assessment design and planning <a href="http://www.iml.uts.edu.au/assessment/simassessment/">http://www.iml.uts.edu.au/assessment/simassessment/</a>

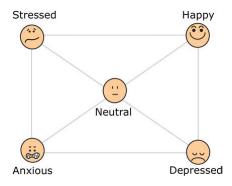
SimAssessment is an assessment simulator developed by the Institute for Interactive Media and Learning, University of Technology, Sydney. It is designed to provide an environment for teachers to test how assessment patterns can affect the way students engage with subject content. As a designer involved in this project, the use of a 'cartoonish' approach—representing data visually and interactively—contributed to some of my current interests.





Early prototype screens for SimAssessment showing cartoon students and teaching mentor. 100

SimAssessment explored the use of cartoon facial expressions to discriminate between five basic emotional states.

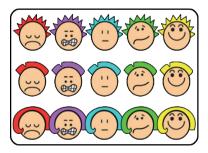


Four basic emotional states (plus neutral) displayed by students' faces in response to assessment.

This was complicated at one point by the use of coloured hairstyles, which as a random element did not relate to any variable, but instead proved a distraction (What does a colour mean?). Brightness of a face was one way to distinguish states and interrupt monotony in the visual field by making certain faces stand out more.

SimAssessment took some of its design approach from Chernoff faces (Chernoff 1973) that use cartoon facial cues to attract attention through small changes. Chernoff faces can map up to twenty or more variables, making it a convenient way to compress statistical data.

<sup>&</sup>lt;sup>100</sup> Early protype designs by Gerhard Bachfischer.



Face and hairstyle variations create a range of visual indicators.

The impact of visual indicators such as cartoon faces is reduced when there are too many variables to distinguish 'at a glance'. It is much better, to aggregate measures into a single visual indicator—a single face—to represent the average state of a system and to provide textual descriptors in context that clarify the visual appearance. Eventually through familiarity, textual explanations can be ignored, as the visual cues are enough to trigger recognition of the meaning inferred.

This is where words and visual symbols do better when combined. Visual icons in interface displays rarely make their implicit meaning clear unless they are learnt or form part of a wider convention. Adding explicit labels to icons immediately clarifies what the icon stands for, and therefore promotes both the initial recognition of the symbolism as well as the icon's 'learn-ability' so that eventually the labels can be ignored all together and navigation of the interface can take place through image recognition alone.

# D: Web sites that challenge the mainstream news

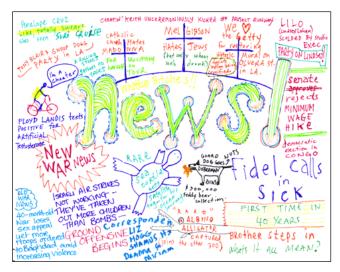
Week in review <a href="http://www.weekinreview.org">http://www.weekinreview.org</a>

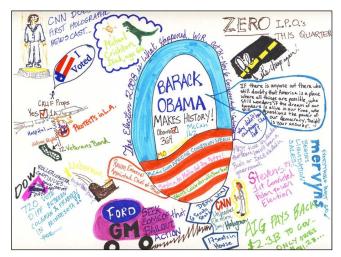
Week In Review is best described as a manual collective aggregation of personal responses to news in a small social network. News as the participants remember it, is mapped onto a sheet of paper. It is a record of what people remember of the recent news and how they interpret it. It is an inspirational example of social news mapping and cartooning working at a local level. Seeing this in many ways provided some conceptual framework for SketchyTruth.

Week In Review is a great example of social news filtering. The small social groups' collective summary of the news that has recently grabbed their attention is based upon their shared local environment, news sources, influences and interests. It is not a distributed network (not even a sample of many inputs), such as that afforded by communities online, yet it has significance and meaning to those engaged in the process.

The hand-drawn summary of news becomes the primary social object—the reason—around which participants engage with each other and the news of the previous week.

Meeting at a local bar, the participants' social interaction and negotiation of what actually rates as news is distilled down to sometimes unexpected—and satirical—representations. This is the amplification of news information through simplification at a very kinaesthetic, tactile level. It more casually does what the editorial cartoonist does, but with less flair—and with probably a lot more beer.







[Week In Review website]

#### Statement of Intent

We live in a time of an ever-consolidating media industry. Fewer news outlets inevitably give way to fewer perspectives.

We are saturated with information. There's more "news" out there than any one person can follow. It is organized at the editorial discretion of it's publisher, and what's ultimately communicated is a contrived point of view.

Yet we all have experiences. We are all exposed to events. We all pay attention to something. But we don't all have a say in what becomes headline news.

Week In Review offers an alternative. Documenting and reporting hearsay recounts of the news, a forum is created in which people who care and are interested in the world around them can have a voice.

Each week, Week In Review participants assemble at a local bar to share, discuss and reflect upon timely news and draw the Week In Review. All stories come from selfappointed correspondents who report on what they care about.

Anyone can come; anyone can participate on-line; anyone's news can become a headline. Our participants' discretion is what matters.

What results is an at a glance, single-sheet, hand drawn representation of the week's news, posted on-line for the larger, virtual audience.

What happens is the news. The news is what happens.

Weekinreview

# Media Lens <a href="http://www.medialens.org/">http://www.medialens.org/</a>

Media lens takes a serious critical view of the news media "correcting the distorted vision of the corporate media"101.

> Media Lens is a UK-based media-watch project, which offers authoritative criticism of mainstream media bias and censorship, as well as providing in-depth analysis, quotes, media contact details and other resources...

...Our aim is to encourage the general population to challenge media managers, editors and journalists who set news agendas that traditionally reflect establishment/elite interests. We hope to raise public awareness of the underlying systemic failings of the corporate media to report the world around us honestly, fairly and accurately...<sup>102</sup>

MediaLens is a response based on our conviction that mainstream newspapers and broadcasters provide a profoundly distorted picture of our world. We are convinced that the increasingly centralised, corporate nature of the media means that it acts as a de facto propaganda system for corporate and other establishment interests...

Media Lens has grown out of our frustration with the unwillingness, or inability, of the mainstream media to tell the truth about the real causes and extent of many of the problems facing us, such as human rights abuses, poverty, pollution and climate change. Because much modern suffering is rooted in the unlimited greed of corporate profit-maximising - in the subordination of people and planet to profit - it seems to us to be a genuine tragedy that society has for so long been forced to rely on the corporate media for 'accurate' information. It seems clear to us that quite obvious conflicts of interest mean it is all but impossible for the media to provide this information. We did not expect the Soviet Communist Party's newspaper Pravda to tell the truth about the Communist Party, why should we expect the corporate press to tell the truth about corporate power?

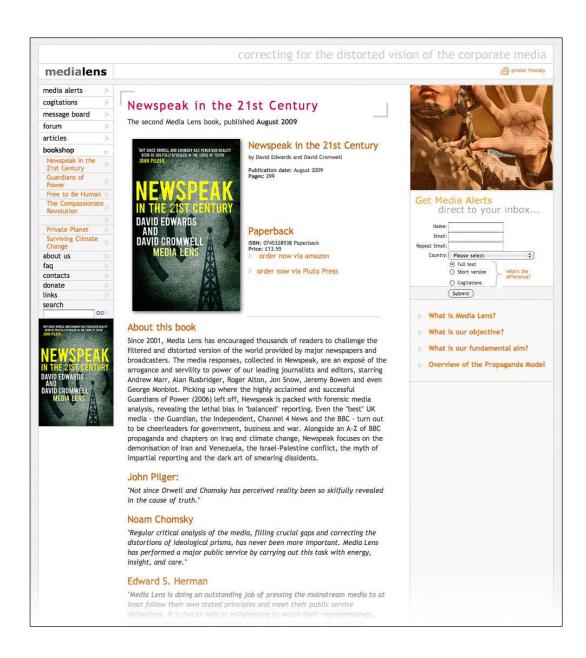
We believe that media 'neutrality' is a deception that often serves to hide systematic pro-corporate bias. 'Neutrality' most often involves 'impartially' reporting dominant establishment

<sup>&</sup>lt;sup>101</sup> From <a href="http://www.medialens.org/fag/#whatis">http://www.medialens.org/fag/#whatis</a>.

<sup>102</sup> From <a href="http://www.medialens.org/about/">http://www.medialens.org/about/>.

views, while ignoring all non-establishment views. In reality it is not possible for journalists to be neutral - regardless of whether we do or do not overtly give our personal opinion, that opinion is always reflected in the facts we choose to highlight or ignore...

We recommend Herman and Chomsky's "propaganda model of media control" as a basis for understanding the manner in which truth is filtered from, rather than consciously obstructed by, the modern media system...

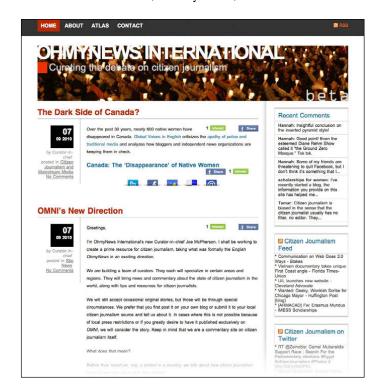


# OhmyNews <a href="http://english.ohmynews.com/">http://english.ohmynews.com/</a>

OhmyNews is a South Korean online newspaper website with the motto "Every Citizen is a Reporter":

> With OhmyNews, we wanted to say goodbye to 20th-century journalism where people only saw things through the eyes of the mainstream, conservative media," said editor and founder, Oh Yeon-ho. "Our main concept is every citizen can be a reporter. We put everything out there and people judge the truth for themselves."

"It's entertaining, it's heartfelt and it's caring," said Don Park, a Korean-American reader who said he visits OhmyNews daily. "It's like blogs. It has a personal side and an emotional side. It has human texture. It's not bland and objective like traditional news. There's a definite bias. It's not professional, but you get the facts.... I trust it" (Kahney 2003).



# FAIR <a href="http://www.fair.org">http://www.fair.org</a>

### What's Wrong With the News?

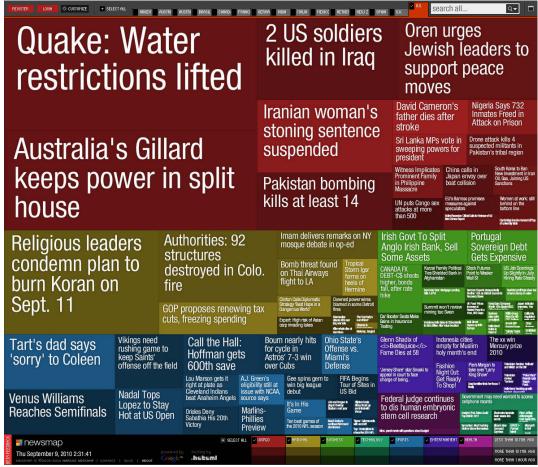
Independent, aggressive and critical media are essential to an informed democracy. But mainstream media are increasingly cozy with the economic and political powers they should be watchdogging. Mergers in the news industry have accelerated, further limiting the spectrum of viewpoints that have access to mass media.



## Newsmap <a href="http://marumushi.com/projects/newsmap">http://marumushi.com/projects/newsmap</a>

Newsmap is an application that visually reflects the constantly changing landscape of the Google News news aggregator.

Newsmap does not pretend to replace the googlenews aggregator. It's objective is to simply demonstrate visually the relationships between data and the unseen patterns in news media. It is not thought to display an unbiased view of the news, on the contrary it is thought to ironically accentuate the bias of it.



NewsMap visualisation of Google news captured 9 September 2010, <a href="http://newsmap.jp/">http://newsmap.jp/</a>>.

# **Storyful** <a href="http://storyful.com/">http://storyful.com/</a>

Storyful is platform for collaborative reporting that promotes the idea that the source, production and consumption of news can be the community itself where "there's a merger between the source and the content producer... where the witness of the news becomes the reporter" (Lavrusik 2010).

# From the About Us page:

Storyful uses the power of social networks to create an authentic, cooperative and socially useful journalism.

Storyful was founded by journalists who wanted to separate the news from the noise of the real-time web. We set out to discover the smartest conversations about world events and raise up the authentic voices on the big stories.

Storyful's golden rule is there is ALWAYS someone closer to the story. And in the last few months, we've worked with people at the heart of the action, capturing turning points in history in words, pictures and video.

Sometimes our sources are local journalists, amateur photographers, or filmmakers. But often the people with the best view of the action are citizens in the right place at the right time.

We believe that there's a good chance that person is you.

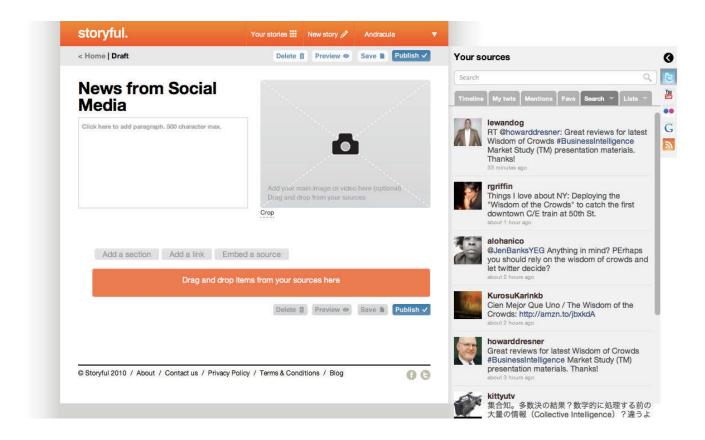
We want to see the story through your eyes. Maybe you can offer a new take on a current story, or a story as yet untold, something the major news organisations simply haven't discovered. Whatever your perspective, we believe it has the power to enrich our understanding of how the world works.

Storyful.com is a place to share with stories with people who want to listen.

Using our storybuilding tool, you'll have the ability to publish on Storyful.com. By posting your stories to our community pages, we can help you share your stories with friends, spread them on Facebook and Twitter, and reach a global audience.

If you wish, we can also pass them on to our our partners in major global news organisations, who have come to realise there is always someone closer to the story.

Our storybuilding tool is live and free to use. So what news do you have for us?"



## News360 <a href="http://www.news360app.com">http://www.news360app.com</a>

"News360 is a next-generation news personalization and aggregation service. It learns from your cloud and uses semantic analysis to inform you on major ongoing events and give you content that is relevant just for you."

"Our goal is to give you as much choice as possible to examine every issue just the way you like it, and to be able to escape media bias and uncertainty"

"By analyzing, with your permission, the data in your Facebook, Twitter, Evernote and Google Reader accounts, and looking at how you use News360."

Available on most smartphones and tablets, News360 can source news based on GPS and Wi-Fi location.

Screen captures from the Apple iPad version of the News360 app, 11 August 2011.



# Bibliography

- Adams, P. 2009, Where do big ideas come from?, Radio podcast, ABC Radio National (Australian Broadcasting Corporation), Elder Hall at the University of Adelaide, 9 July 2009, viewed 16 July 2009, <a href="http://www.abc.net.au/rn/latenightlive/stories/2009/2624318.htm">http://www.abc.net.au/rn/latenightlive/stories/2009/2624318.htm</a>.
- Adams, P., Leak, B. & Spooner, J. 2009, *Quill Award 2009 Lifetime Achievement Award Bruce Petty The Age*, Melbourne Press Club, YouTube, viewed 28 January 2013, <a href="http://www.melbournepressclub.com/quills/2009/lifetime-achievement-award/bruce-petty\_age">http://www.melbournepressclub.com/quills/2009/lifetime-achievement-award/bruce-petty\_age</a>.
- AIGA 2010, 'Symbol Signs', Passenger and pedestrian symbols, viewed 28 August 2010, <a href="http://www.aiga.org/symbol-signs/">http://www.aiga.org/symbol-signs/</a>>.
- Alexander, G. 2001, Space Odysseys: sensation & immersion: Definition, Education kit, Art Gallery of New South Wales, viewed 20 April 2010, <a href="http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodysseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodyseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodyseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodyseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodyseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodyseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodyseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodyseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/sub/spaceodyseys/definitions.html#i>">http://www.artgallery.nsw.gov.au/
- Allen, P.V. 2004, 'Thinking About Interaction Design for Online News Delivery', USC Annenberg Online Journalism Review, weblog, 1 July 2004, viewed 30 August 2004, <a href="http://ojr.org/ojr/technology/1088538463.php">http://ojr.org/ojr/technology/1088538463.php</a>.
- Altheide, D.L. 1997, "THE NEWS MEDIA, THE PROBLEM FRAME, AND THE PRODUCTION OF FEAR", *The Sociological Quarterly*, vol. 38, no. 4, pp. 647-68.
- Altheide, D.L. 2009, Terror post 9/11 and the media, Peter Lang, New York.
- Altheide, D.L. & Michalowski, R.S. 1999, 'FEAR IN THE NEWS. A Discourse of Control', *The Sociological Quarterly*, vol. 40, no. 3, pp. 475-503.
- Anon 2004, 'Drawing conclusions', Sunday Age (Agenda), June 27, 2004, pp. 4-6.
- AP 2008, 'A New Model for News Studying the Deep Structure of Young-Adult News Consumption', Report, The Associated Press and the Context-Based Research Group, viewed 10 June 2008, <a href="http://www.ap.org/newmodel.pdf">http://www.ap.org/newmodel.pdf</a>>.
- AP news values & principles 2006, Associated Press, viewed 8 August 2010, <a href="http://www.ap.org/company/news-values">http://www.ap.org/company/news-values</a>.
- Apple App Store banner graphic 2011, Graphic, Apple Computer Inc., App Marketing and Identity, Guidelines for Developers, viewed 8 November 2011, <a href="http://developer.apple.com/appstore/AppStoreMarketingGuidelines.pdf">http://developer.apple.com/appstore/AppStoreMarketingGuidelines.pdf</a>.
- Armano, D. 2006, 'Influence Ripples', *Logic+Emotion*, weblog, viewed 15 August 2009, <a href="http://darmano.typepad.com/logic\_emotion/2006/08/influence\_rippl.html">http://darmano.typepad.com/logic\_emotion/2006/08/influence\_rippl.html</a>>.
- Armano, D. 2007, 'Influence Ripples + Social Media Fragmentation', *Logic+Emotion*, weblog, viewed 15 August 2009, <a href="http://darmano.typepad.com/logic\_emotion/2007/09/influence-rippl.html">http://darmano.typepad.com/logic\_emotion/2007/09/influence-rippl.html</a>>.
- Armstrong, S. 2005, 'It's going to get a lot worse before it gets worse still', Guardian News and Media Limited, viewed 14 August 2006, <a href="http://www.guardian.co.uk/media/2005/oct/31/bbc.broadcasting">http://www.guardian.co.uk/media/2005/oct/31/bbc.broadcasting</a>.
- Bacon, W. & Price, J. 2011, News of the World scandal a litmus test for independent journalism in Australia, The Conversation, viewed 11 November 2011, <a href="http://theconversation.edu.au/news-of-the-world-scandal-a-litmus-test-for-independent-journalism-in-australia-2545">http://theconversation.edu.au/news-of-the-world-scandal-a-litmus-test-for-independent-journalism-in-australia-2545</a>.
- Baker, C. 1989, 'Adelaide Festival of Arts', Poster review, Fairfax Media Limited, Sydney Morning Herald, viewed 29 October 2009, <a href="http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database/?irn=103365&search=creativity&site\_id=3>">http://www.powerhousemuseum.com/collection/database\_id=3>">http://www.powerhousemuseum.com/collection/database\_id=3>">htt

- Baker, C.E. 2007, Media concentration and democracy: why ownership matters, Cambridge University Press, Cambridge; New York.
- Bamford, A. & François, A. 2001, 'Generating meaning and visualising self: Graphic symbolism and interactive online cartoon', *International Journal of Learning*, vol. 8.
- Barry, D. 2009, 'Media140: Julie Posetti's Revolution', *Woolly Days*, weblog, viewed 13 November 2009, <a href="http://woollydays.wordpress.com/2009/11/10/media140-julie-posetti's-revolution/">http://woollydays.wordpress.com/2009/11/10/media140-julie-posetti's-revolution/</a>.
- Bateson, G. 1979, Mind and nature: a necessary unity, 1st edn, Dutton, New York.
- Baudrillard, J. 1994, Simulacra and simulation, University of Michigan Press, Ann Arbor.
- Baudrillard, J. 2007, In the shadow of the silent majorities, or, The end of the social, Semiotext(e); Distributed by MIT Press, Los Angeles, Cambridge, Mass.
- Beck, H. 1933, *Map (1983/4/3576)*, London Transport Museum & Transport for London, viewed 28 August, 2010, <a href="http://homepage.ntlworld.com/clive.billson/tubemaps/1933.html">http://homepage.ntlworld.com/clive.billson/tubemaps/1933.html</a>.
- Bohm, D., Nichol, L. & ebrary Inc. 1996, On dialogue, Routledge, <a href="http://site.ebrary.com/lib/utslibrary/Doc?id=10057300">http://site.ebrary.com/lib/utslibrary/Doc?id=10057300</a>.
- Bolz, N. 1998, 'The user-illusion of the world (2), on the meaning of design', *Mediamatic magazine*, vol. 9, no. 2/3 (double issue), viewed 8 October 2005, <a href="http://www.mediamatic.net/5812/en/the-user-illusion-of-the-world-2">http://www.mediamatic.net/5812/en/the-user-illusion-of-the-world-2</a>.
- Bomeisler, B. 2011, Learn to Draw: Drawing on the Right Side of the Brain: The Theory Drawing on the Right Side of the Brain Inc., viewed 12 November 2011, <a href="http://drawright.com/theory.htm">http://drawright.com/theory.htm</a>.
- Bourriaud, N., Herman, J. & Schneider, C. 2002, Postproduction: culture as screenplay: how art reprograms the world, Lukas & Sternberg, New York.
- Bowman, S. & Willis, C. 2003, We Media: How Audiences Are Shaping the Future of News and Information, The Media Center at the American Press Institute.
- Broken News: About The Show 2005, BBC Comedy, viewed 14 August 2006, <a href="http://www.bbc.co.uk/comedy/brokennews/aboutshow\_feature.shtml">http://www.bbc.co.uk/comedy/brokennews/aboutshow\_feature.shtml</a>>.
- Brooker, C. 2009, 'Breaking news broke my mind', *Charlie Brooker on new series Newswipe*, Guardian News and Media Limited, viewed 4 March 2010, <a href="http://www.guardian.co.uk/media/2009/mar/19/newswipe-charlie-brooker">http://www.guardian.co.uk/media/2009/mar/19/newswipe-charlie-brooker</a>.
- Brown, S. 2008, *Tinkering as a Mode of Knowledge Production*, Carnegie Foundation for the Advancement of Teaching, Stanford, CA, viewed 1 November 2009, <a href="http://youtu.be/9u-MczVpkUA">http://youtu.be/9u-MczVpkUA</a>.
- Bruce Petty and Bill Leak in conversation 2008, SlowTV, The Monthly, viewed 2 September 2010, <a href="http://www.themonthly.com.au/bruce-petty-and-bill-leak-conversation-1253">http://www.themonthly.com.au/bruce-petty-and-bill-leak-conversation-1253</a>.
- Burke, E. 2008, What can we learn about usability, Cartoon, viewed 29 August 2009, <a href="http://stuffthathappens.com/blog/2008/03/05/simplicity/">http://stuffthathappens.com/blog/2008/03/05/simplicity/</a>.
- Car mechanics desktop PC and Mac wallpaper 2008, Illustration (1024x768), Wallpaperstock, viewed 30 June 2010, <a href="http://wallpaperstock.net/car-mechanics\_wallpapers\_11816\_1024x768\_1.html">http://wallpaperstock.net/car-mechanics\_wallpapers\_11816\_1024x768\_1.html</a>.
- Card, S.K., Mackinlay, J.D. & Shneiderman, B. 1999, Readings in information visualization: using vision to think, Morgan Kaufmann Publishers, San Francisco, Calif.
- Chernoff, H. 1973, 'The Use of Faces to Represent Points in k-Dimensional Space Graphically', *Journal of the American Statistical Association*, vol. 68, no. 342, p. 361.
- Chipp, H.B. 1968, Theories of modern art: a source book by artists and critics, University of California Press, Berkeley, Calif.

- Clune, B. 2009, 'Journalists Are The Audience Formerly Known As The Media', NORG: people powered news, weblog, viewed 13 November 2009, <a href="http://www.bronwenclune.com/2009/11/10/journalists-are-the-audience-formerly-known-as-the-media/">http://www.bronwenclune.com/2009/11/10/journalists-are-the-audience-formerly-known-as-the-media/</a>.
- CNN 2010, *The Most Trusted Name in News*, Cable News Network (AOL Time Warner), viewed 29 April 2010, <a href="http://edition.cnn.com/services/trusted/">http://edition.cnn.com/services/trusted/</a>>.
- Conceptual Art (via the Internet Archive, Way back machine), Tate Britain, viewed 27 August 2010, <a href="http://bit.ly/bbkxxE">http://bit.ly/bbkxxE</a>.
- 'The Concise Oxford Dictionary of Art Terms, Cartoon', Oxford Art Online, viewed 25 August 2010, <a href="http://www.oxfordartonline.com.ezproxy.lib.uts.edu.au/subscriber/article/opr/t4/e363">http://www.oxfordartonline.com.ezproxy.lib.uts.edu.au/subscriber/article/opr/t4/e363</a>.
- , 'Control Data 3200 Computer System Real Time Applications | Computer History Museum', Photograph in promotion material, Control Data Corporation (CDC), viewed 24 August 2010, <a href="http://www.computerhistory.org/collections/accession/102646086">http://www.computerhistory.org/collections/accession/102646086</a>.
- Crawford, A. 2000, 'Satirical bite', *Bruce Petty, Etchings and Drypoints, Chrysalis Publishing, Melbourne*, Exhibition review, The Melbourne Age newspaper Fairfax Media Limited, Melbourne, viewed 9 September 2005, <a href="http://www.theage.com.au/entertainment/2000607/A42118-2000Jun6.html">http://www.theage.com.au/entertainment/2000607/A42118-2000Jun6.html</a>.
- Davies, N. 2008a, Flat Earth news: an award-winning reporter exposes falsehood, distortion and propaganda in the global media, Chatto & Windus, London.
- Davies, N. 2008b, 'Flat earth news by Nick Davies', radio interview, ABC Radio National Breakfast, viewed 4 September 2008, <a href="https://www.abc.net.au/rn/breakfast/stories/2008/2351353.htm">https://www.abc.net.au/rn/breakfast/stories/2008/2351353.htm</a>.
- Davies, N. 2008c, 'Our media have become mass producers of distortion', *An industry whose task should be to filter out falsehood has become a conduit for propaganda and second hand news*, Guardian News and Media Limited, viewed 23 November 2009, <a href="http://www.guardian.co.uk/commentisfree/2008/feb/04/comment.pressandpublishing">http://www.guardian.co.uk/commentisfree/2008/feb/04/comment.pressandpublishing</a>.
- Deighton, L. 1979, Basic French cooking: including chapters on l'art culinaire, les viandes, les fromages, les corps gras, la carte des vins, la cuisine fran\*aise et le froid, le lexique, la batterie de cuisine and 50 cookstrips, Cape, London.
- Deleuze, G. 2004, Difference and repetition, New edn, Continuum, London.
- Deleuze, G. & Guattari, F. 1987, A thousand plateaus: capitalism and schizophrenia, University of Minnesota Press, Minneapolis.
- Dery, M. 1993, Culture Jamming: Hacking, Slashing and Sniping in the Empire of Signs, Originally Published by the Open Magazine Pamphlet Series, viewed 31 October 2009, <a href="http://www.markdery.com/archives/books/culture\_jamming/">http://www.markdery.com/archives/books/culture\_jamming/</a>.
- Dixon, N.M. 2000, Common knowledge: how companies thrive by sharing what they know, Harvard Business School; McGraw-Hill, Boston, Mass. New York.
- Duman, A. 2007, 'View of the Tate Modern, London', in K.A. Harmon (ed.), *The Map of the Art*, The Morning News, viewed 12 September 2010, <a href="http://www.themorningnews.org/gallery/the-map-of-the-art">http://www.themorningnews.org/gallery/the-map-of-the-art</a>.
- Eisner, W. 1996, Graphic storytelling, Poorhouse Press, Tamarac, FL.
- Eliot, T.S. 1920, *The Sacred Wood: Essays on Poetry and Criticism*, Methuen, viewed 22 January 2010, <a href="http://archive.org/details/sacredwoodessays00eliorich">http://archive.org/details/sacredwoodessays00eliorich</a>.
- Flanagan, M. 2002, 'Bruce Petty profile', in Anon (ed.)The Age newspaper online Fairfax Media Limited, viewed 26 February 2006, <a href="http://about.theage.com.au/view\_profile.asp?intid=854">http://about.theage.com.au/view\_profile.asp?intid=854</a>>.
- Fling, B. 2007, 'Mobile 2.0', 24 ways, weblog, viewed 23 December 2008, <a href="http://24ways.org/2007/mobile-2.0">http://24ways.org/2007/mobile-2.0</a>.
- FOX 2010, FOX News Network, Breaking News | Latest News | Current News, FOXNews.com, viewed 29 April 2010, <a href="http://www.foxnews.com/">http://www.foxnews.com/</a>>.

- Galanter, P. 2003, 'What is generative art? Complexity theory as a context for art theory', *In GA2003 6th Generative Art Conference*, Conference paper, Generative Design Lab. Milan Polytechnic, Milan., viewed 24 October 2005, <a href="http://philipgalanter.com/downloads/ga2003\_what\_is\_genart.pdf">http://philipgalanter.com/downloads/ga2003\_what\_is\_genart.pdf</a>>.
- Galanter, P. & Levy, E.K. 2002, 'Complexity art and complex systems', Gallery guide, Samuel Dorsky museum of art, United States, viewed 8 September 2009, <a href="http://www.philipgalanter.com/academia/complexity\_show/pages/statement\_page.html">http://www.philipgalanter.com/academia/complexity\_show/pages/statement\_page.html</a>.
- Gillmor, D. 2004, We the media: grassroots journalism by the people, for the people, 1st edn, O'Reilly, Beijing; Sebastopol, CA.
- Greenberger, M., University, J.H. & Institution, B. 1971, Computers, communications, and the public interest, Johns Hopkins Press, Baltomore.
- Greisman, H.C. 1977, 'Social meanings of terrorism: Reification, violence, and social control', *Crime, Law and Social Change*, vol. 1, no. 3, pp. 303-18.
- "grok". Oxford Dictionaries. April 2010, Oxford University Press, viewed 9 September 2010, <a href="http://oxforddictionaries.com/definition/english/grok">http://oxforddictionaries.com/definition/english/grok</a>.
- Grossman, L. 2006, You Yes, You Are TIME's Person of the Year, TIME magazine, viewed 20 April 2009, <a href="http://www.time.com/time/magazine/article/0,9171,1570810,00.html">http://www.time.com/time/magazine/article/0,9171,1570810,00.html</a>>.
- 'Grove Art Online, Sketch', Oxford Art Online, viewed 25 August 2010,
  <a href="http://www.oxfordartonline.com.ezproxy.lib.uts.edu.au/subscriber/article/grove/art/T079106">http://www.oxfordartonline.com.ezproxy.lib.uts.edu.au/subscriber/article/grove/art/T079106</a>>.
- Guy, H. 2009, *Australian political cartooning a rich tradition*, australia.gov.au, viewed 29 September 2009, <a href="http://australia.gov.au/about-australia/australian-story/austra-political-cartooning">http://australia.gov.au/about-australia/australian-story/austra-political-cartooning</a>.
- Harding-Smith, R. 2011, 'Media ownership and regulation in Australia | Discussion paper', viewed 11 November 2011, <a href="http://cpd.org.au/2011/08/media-ownership-and-regulation-in-australia-discussion-paper/">http://cpd.org.au/2011/08/media-ownership-and-regulation-in-australia-discussion-paper/</a>.
- Harmon, K.A. 2004, You are here: personal geographies and other maps of the imagination, 1st edn, Princeton Architectural Press, New York.
- Harmon, K.A. & Clemans, G. 2009, *The map as art : contemporary artists explore cartography*, Princeton Architectural Press, New York.
- Hemmingway, E. 2008, Into the newsroom: exploring the digital production of regional television news, Routledge, London.
- Herman, E.S. & Chomsky, N. 1994, Manufacturing consent: the political economy of the mass media, Pantheon; Vintage, New York, London.
- Herman, E.S. & Chomsky, N. 2008, Manufacturing consent: the political economy of the mass media, Updated edn, Bodley Head, London.
- Hockenberry, M.J., Wilson, D. & Wong, D.L. 2009, Wong's essentials of pediatric nursing, 8th edn, Mosby/Elsevier, St. Louis, MO.
- Hook, G.R. 1998, 'Stay between the flags!', *Republic Beach*, Cartoon, Sunday Herald Sun, Melbourne, viewed November 5 1999, <a href="http://www.nma.gov.au/collections-search/display?irn=117094">http://www.nma.gov.au/collections-search/display?irn=117094</a>.
- Hosterman, A.R. 2007, 'Amplification through simplification: rhetoric invades the funny pages', PowerPoint Presentation, Texas Tech University, viewed 10 August 2010, <a href="http://www.powershow.com/view/2ec6d-ZGZmM/AMPLIFICATION\_THROUGH\_SIMPLIFICATION\_powerpoint\_ppt\_presentation">http://www.powershow.com/view/2ec6d-ZGZmM/AMPLIFICATION\_THROUGH\_SIMPLIFICATION\_powerpoint\_ppt\_presentation</a>.
- Howe, J. 2006, 'Crowdsourcing: A Definition', *Crowdsourcing*, weblog, viewed 3 May 2010, <a href="http://crowdsourcing.typepad.com/cs/2006/06/crowdsourcing\_a.html">http://crowdsourcing.typepad.com/cs/2006/06/crowdsourcing\_a.html</a>.
- Ibrahim, M. 2009, 'THEORY OF BOUNDED RATIONALITY', Public Management (00333611), vol. 91, no. 5, pp. 3-5.

- INMA 2010, *Slogans*, International Newsmedia Marketing Association (INMA), viewed 29 April 2010, <a href="http://www.inma.org/modules/article/index.cfm?action=slogans&criteria=slogans">http://www.inma.org/modules/article/index.cfm?action=slogans&criteria=slogans>.
- Jameson, F., Hardt, M. & Weeks, K. 2000, The Jameson reader, Blackwell, Oxford, UK; Malden, Mass.
- Janis, I.L. 1972, Victims of groupthink: a psychological study of foreign policy decisions and fiascoes, Houghton: Mifflin, Boston.
- Jarvis, J. 2008, 'The press becomes the press-sphere', *BuzzMachine*, weblog, viewed 17 December 2008, <a href="http://www.buzzmachine.com/2008/04/14/the-press-becomes-the-press-sphere/">http://www.buzzmachine.com/2008/04/14/the-press-becomes-the-press-sphere/</a>.
- Jay, R. 2008, 'A Most Useful Definition of Citizen Journalism', PressThink, weblog, 14 July, 2008, viewed 5 October 2009, <a href="http://journalism.nyu.edu/pubzone/weblogs/pressthink/2008/07/14/a\_most\_useful\_d.html">http://journalism.nyu.edu/pubzone/weblogs/pressthink/2008/07/14/a\_most\_useful\_d.html</a>.
- The Blackwell Dictionary of Sociology 2000, Blackwell Publishers.
- Johnson, G., Gross, M.D., Hong, J. & Do, E.Y.-L. 2009, 'Computational Support for Sketching in Design: A Review', Found. Trends Hum.-Comput. Interact., vol. 2, no. 1, pp. 1-93.
- Kahney, L. 2003, Citizen Reporters Make the News, WIRED.com, Condé Nast, viewed 26 May 2006, <a href="http://www.wired.com/culture/lifestyle/news/2003/05/58856">http://www.wired.com/culture/lifestyle/news/2003/05/58856</a>.
- Korzybski, A. 1958, Science and sanity: an introduction to non- aristotelian systems and general semantics, 4th edn, The Inst. of Gen. Semantics, Lakeville, Conn.
- Kovach, B. & Rosenstiel, T. 2007, The elements of journalism: what newspeople should know and the public should expect, 1st rev. edn, Three Rivers Press, New York.
- Kramer, H. 1974, The age of the avant-garde: an art chronicle of 1956-1972, Secker & Warburg, London.
- Kull, S., Ramsay, C. & Lewis, E. 2003, 'Misperceptions, the Media, and the Iraq War', *Political Science Quarterly*, vol. 118, no. 4 Winter 2003-04, pp. 569-98.
- Lasica, J.D. 1996, 'John Perry Barlow: 'People want to bypass the mass media", *jd lasica*, weblog, viewed 29 August 2009, <a href="http://www.jdlasica.com/1996/05/24/john-perry-barlow-people-want-to-bypass-the-mass-media/">http://www.jdlasica.com/1996/05/24/john-perry-barlow-people-want-to-bypass-the-mass-media/</a>
- Latour, B. 1987, Science in action: how to follow scientists and engineers through society, Harvard University Press, Cambridge, Mass.
- , 'Laughter lines: A celebration of cartooning and illustration, from the home of humour, wit and satire.' 2004, Agenda magazine, Fairfax media, pp. 6-18.
- Lavrusik, V. 2009, '10 News Media Content Trends to Watch in 2010', *Mashable*, weblog, Mashable, Inc., viewed 24 March 2010, <a href="http://mashable.com/2009/12/24/news-media-content-trends/">http://mashable.com/2009/12/24/news-media-content-trends/</a>.
- Lavrusik, V. 2010, 'he Future of Social Media in Journalism', *Mashable*, weblog, Mashable, Inc., viewed 5 October 2010, <a href="http://mashable.com/2010/09/13/future-social-media-journalism/">http://mashable.com/2010/09/13/future-social-media-journalism/</a>>.
- Leadbeater, C. 2008, 'We Think', Mass innovation, not mass production: The Power of Mass Creativity, Video, viewed 7 November 2009, <a href="https://youtu.be/qiP79vYsfbo">http://youtu.be/qiP79vYsfbo</a>.
- Leonhard, G. 2007, 'The End of Control How technology is shifting control over media to the people formerly known as consumers', Blog Book, p. 1, viewed 9 January 2009, <a href="http://www.endofcontrol.com/free-pdfs-with-the-chapte.html">http://www.endofcontrol.com/free-pdfs-with-the-chapte.html</a>.
- Leonhard, G. 2008, '10 quick ways to reinvent Print Media', Gerd Leonhard Keynote Speaker, Media Futurist,

  Strategic Advisor, Author and Blogger, weblog, viewed 9 January 2009,

  <a href="http://www.mediafuturist.com/2008/12/10-quick-ways-t.html">http://www.mediafuturist.com/2008/12/10-quick-ways-t.html</a>.

- Lester, P.M. 2006, 'The beginning of a universal visual culture: Discovering the potential of outdoor screens for urban society', no. #4 Special Issue, viewed 16 October 2009, <a href="http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/1543/1458">http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/1543/1458</a>.
- Levy, P. 1997, Collective Intelligence: Mankind's Emerging World in Cyberspace, Perseus Books.
- LeWitt, S. 2000, 'Sol LeWitt, Paragraphs on Conceptual Art', in A. Alberro & B. Stimson (eds), *Conceptual art: a critical anthology*, the MIT press, pp. 12-6.
- Little, A. 2007, 'What makes news?', *Making News: Part One*, BBC World Service, Documentary archive, viewed 20 April 2009, <a href="http://www.bbc.co.uk/worldservice/specials/639\_fts\_programmes/page2.shtml">http://www.bbc.co.uk/worldservice/specials/639\_fts\_programmes/page2.shtml</a>.
- Living Stories 2010, Google, The New York Times and The Washington Post, viewed 24 March 2010, <a href="http://livingstories.googlelabs.com/">http://livingstories.googlelabs.com/</a>.
- M.River & T.Whid Art Associates (MTAA) 1997, 'Simple Net Art Diagram', viewed 4 May, 2010, <a href="http://www.mtaa.net/mtaaRR/off-line\_art/snad.html">http://www.mtaa.net/mtaaRR/off-line\_art/snad.html</a>.
- MacLeod, H. 2007a, 'More thoughts on social objects', *Gapingvoid*, weblog, viewed 17 December, 2008, <a href="http://gapingvoid.com/2007/10/24/more-thoughts-on-social-objects/">http://gapingvoid.com/2007/10/24/more-thoughts-on-social-objects/</a>.
- MacLeod, H. 2007b, 'Social objects for beginners', *Gapingvoid*, weblog, viewed 16 October 2007, <a href="http://gapingvoid.com/2007/12/31/social-objects-for-beginners/">http://gapingvoid.com/2007/12/31/social-objects-for-beginners/</a>.
- Magritte, R. 1928-29, 'La trahison des images (The Treachery of Images)', Painting, Los Angeles County Museum of Art (LACMA), Los Angeles, viewed 25 August 2009, <a href="http://en.wikipedia.org/wiki/The\_Treachery\_of\_Images">http://en.wikipedia.org/wiki/The\_Treachery\_of\_Images</a>>.
- Manning, A.D. 1998, 'Understanding Comics: The Invisible Art', *Professional Communication, IEEE Transactions on*, vol. 41, no. 1, pp. 66-9.
- Manning, H. & Phiddian, R. 2004a, 'Censorship and the Political Cartoonist'.
- Manning, H. & Phiddian, R. 2004b, 'In defence of the political cartoonists' licence to mock', *Australian Review of Public Affairs*, vol. 5, no. 1, pp. 25-42.
- Manning, P. 2006, 'Calling them to account', *How can we demand higher standards from our failing news media?*,

  Public lecture, UTS Speaks, University of Technology, Sydney, Guthrie Theatre, viewed 8 March 2010, <a href="http://www.uts.edu.au/new/speaks/2006/October/resources/0410-transcript.html">http://www.uts.edu.au/new/speaks/2006/October/resources/0410-transcript.html</a>>.
- Manovich, L. 2001, The language of new media, MIT Press, Cambridge, Mass.; London.
- Manovich, L. 2004, 'Abstraction and Complexity', Essay, viewed 20 April 2009, <a href="http://manovich.net/articles/">http://manovich.net/articles/</a>.
- McCloud, S. 1993, Understanding comics: the invisible art, Kitchen Sink Press, Northampton, MA.
- McCloud, S. 2005, *Understanding comics conference presentation*, TED, viewed 14 January 2009, <a href="http://www.ted.com/index.php/talks/scott\_mccloud\_on\_comics.html">http://www.ted.com/index.php/talks/scott\_mccloud\_on\_comics.html</a>>.
- McCloud, S. 2010, *What Learning Looks Like*, viewed 10 June 2010, <a href="http://scottmccloud.com/2010/05/11/what-learning-looks-like/">http://scottmccloud.com/2010/05/11/what-learning-looks-like/</a>.
- McKane, A. 2006, News writing, SAGE Publications, Thousand Oaks, Calif.
- McLuhan, M. 1964, Understanding media: the extensions of man, McGraw-Hill, New York.
- Meredith, G. 2004, The Egoist, Kessinger Publishing.
- Mies: The Man, The Legacy 2012, Mies van der Rohe Society, Illinois Institute of Technology, viewed 25 January 2012, <a href="http://www.miessociety.org/legacy/">http://www.miessociety.org/legacy/</a>.

- Moir, A. 2004, 'Quick, Someone call a spin-doctor!', Cartoon, Sydney Morning Herald, viewed 20 April 2009, <a href="http://nla.gov.au/nla.pic-vn3539607">http://nla.gov.au/nla.pic-vn3539607</a>>.
- Morville, P. 2005, Ambient findability What we find changes who we become., O'Reilly, Sebastopol, Calif.; Farnham.
- Murdoch media crisis Views & Research, The Conversation Media Group, viewed 11 November 2011, <a href="http://theconversation.edu.au/pages/murdoch-media-crisis">http://theconversation.edu.au/pages/murdoch-media-crisis</a>.
- Neisser, U. & Kerr, N. 1973, 'Spatial and mnemonic properties of visual images', *Cognitive Psychology*, vol. 5, no. 2, pp. 138-50.
- O'Brien, D.S. & Fitzgerald, B.F. 2006, 'Mashups, remixes and copyright law', Internet Law Bulletin, vol. 9, no. 2.
- O'Connor, A. 2009, 'Infotainment's Appeals and Consequences', *NeoAmericanist online journal*, vol. 4, no. 2 (Spring/Summer 2009), viewed 9 Nov 2009, <a href="http://www.neoamericanist.org/paper/infotainment's-appeals-and-consequences">http://www.neoamericanist.org/paper/infotainment's-appeals-and-consequences</a>.
- O'Reilly, T. 2005, What Is Web 2.0, Design Patterns and Business Models for the Next Generation of Software, Weblog, O'Reilly Media, viewed 23 March 2006, <a href="http://oreilly.com/pub/a/web2/archive/what-is-web-20.html">http://oreilly.com/pub/a/web2/archive/what-is-web-20.html</a>>.
- OpenStreetMap The Free Wiki World Map, viewed 14 January 2010, <a href="http://www.openstreetmap.org/">http://www.openstreetmap.org/</a>.
- Ortony, A. 1979, Metaphor and thought, Cambridge University Press, Cambridge; New York.
- Ostertag, S. 2010, 'Establishing news confidence: a qualitative study of how people use the news media to know the news-world', *Media, Culture & Society*, pp. 597-614.
- Paivio, A. & Csapo, K. 1973, 'Picture superiority in free recall: Imagery or dual coding?', *Cognitive Psychology*, vol. 5, no. 2, pp. 176-206.
- Pang, A. 2008, 'Reflections on tinkering', *Relevant History*, weblog, viewed 31 October 2009, <a href="http://askpang.typepad.com/relevant\_history/2008/10/reflections-on.html">http://askpang.typepad.com/relevant\_history/2008/10/reflections-on.html</a>.
- Pesce, M. 2008a, 'Synopsis: Sharing:: Hyperconnectivity', *The human network: what happens after we're all connected*, weblog, viewed 1 August 2008, <a href="http://blog.futurestreetconsulting.com/2008/05/16/synopsis-sharing-hyperconnectivity/">http://blog.futurestreetconsulting.com/2008/05/16/synopsis-sharing-hyperconnectivity/</a>.
- Pesce, M. 2008b, 'This, That and the Other', *The human network: what happens after we're all connected?*, weblog, 27 September 2008, viewed 20 August 2009, <a href="http://blog.futurestreetconsulting.com/2008/09/27/this-that-and-the-other/">http://blog.futurestreetconsulting.com/2008/09/27/this-that-and-the-other/</a>.
- Pesce, M. 2009, 'The Power of Sharing', *The Power of Sharing | the human network*, weblog, 10 June 2009, viewed 28 July 2009, <a href="http://blog.futurestreetconsulting.com/2009/06/10/the-power-of-sharing/">http://blog.futurestreetconsulting.com/2009/06/10/the-power-of-sharing/</a>.
- Pesce, M. 2010, 'Digital Nation Roundtable: The Crowd', Frontline life on the virtual frontier, PBS, viewed 22 March 2010, <a href="http://www.pbs.org/wgbh/pages/frontline/digitalnation/forum/the-crowd/">http://www.pbs.org/wgbh/pages/frontline/digitalnation/forum/the-crowd/</a>.
- Petty, B. 1967, Petty's Australia fair, Cheshire, Melbourne; Canberra [etc.].
- Petty, B. 1978, The Petty age, Wild & Woolley, Glebe, N.S.W.
- Petty, B. 1983, Petty's money book, Fontana/Collins, Sydney.
- Petty, B. 1986, Women and men, Allen & Unwin, Sydney.
- Petty, B. & Radcliffe, R. 2008, Bruce Petty's parallel worlds, High Horse, Melbourne.
- Petty, B. & Staff-of-the-Powerhouse-Museum 1988, 'Creativity beam', Sculpture, Powerhouse Museum, Australia, viewed 29 October 2009, <a href="http://from.ph/11309">http://from.ph/11309</a>>.
- Petty, R.E., Cacioppo, J.T. & Leonard, B. 1986, 'The Elaboration Likelihood Model of Persuasion', *Advances in Experimental Social Psychology*, vol. Volume 19, Academic Press, pp. 123-205.

- Phiddian, R. 2004, 'Petty notions, grand designs [The life and work of Bruce Petty until 1975.]', no 176, pp. 26-39, <a href="http://search.informit.com.au/fullText">http://search.informit.com.au/fullText</a>.
- Plutchik, R. 2001, 'The Nature of Emotions', American Scientist, vol. 89, no. 4, p. 344.
- Potter, D. 2006, *Handbook of Independent Journalism*, Bureau of International Information Programs U.S. Department of State, america.gov, viewed 12 August 2010, <a href="http://www.america.gov/st/democracyhrenglish/2008/April/20080416211618eaifas0.8870203.html">http://www.america.gov/st/democracyhrenglish/2008/April/20080416211618eaifas0.8870203.html</a>.
- Quaqe9 2009, 'Aquaticus Social icons', Graphic, viewed 27 August 2009, <a href="http://www.iconspedia.com/pack/aquaticus-social-1367/">http://www.iconspedia.com/pack/aquaticus-social-1367/</a>.
- Rheingold, H. 2007, 'Using participatory media and public voice to encourage civic engagement', *The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning*, pp. 97-118.
- Roeckelein, J.E. 2004, Imagery in psychology: a reference guide, Praeger, Westport, Conn.u.a.
- Ryan, S. 2006, *Man vs. Machine in Newsreader War*, Wired, <a href="http://www.wired.com/science/discoveries/news/2006/03/70382">http://www.wired.com/science/discoveries/news/2006/03/70382</a>.
- Sauer-Thompson, G. 2007, 'Adelaide Festival of Ideas 2007: Media moves', *Public Opinion*, weblog, Thought Factory, viewed 24 September 2009, <a href="http://www.sauer-thompson.com/archives/opinion/2007/07/adelaide-festiv-3.php">http://www.sauer-thompson.com/archives/opinion/2007/07/adelaide-festiv-3.php</a>.
- Schmidt/Washington, T.S. 2007, 'A Wiki for Whistle-Blowers', *Time magazine online*, TIME Inc., Washington, viewed 10 July 2010, <a href="http://www.time.com/time/nation/article/0,8599,1581189,00.html">http://www.time.com/time/nation/article/0,8599,1581189,00.html</a>.
- Scolari, C.A. 2009, 'Mapping conversations about new media: the theoretical field of digital communication', New Media Society, vol. 11, no. 6, pp. 943-64.
- Scott, R. 1999, 'What is news: the journalist', in J.R. Herman (ed.)vol. 2, Australian Press Council Conference Papers, p. 21, viewed 12 August 2010, <a href="http://www.presscouncil.org.au/pcsite/pubs/launston.pdf">http://www.presscouncil.org.au/pcsite/pubs/launston.pdf</a>>.
- Seale, C. 2004, Researching society and culture, 2nd edn, SAGE, London.
- Seuss 1962, Dr. Seuss's sleep book, Collins, London.
- Seuss, D. 1942, *The tail of the boxing kangaroo*, Cartoon, PM Magazine, Dr. Seuss Collection, MSS 230. Mandeville Special Collections Library, UC San Diego, viewed 18 March 2010, <a href="http://libraries.ucsd.edu/speccoll/dswenttowar/#ark:bb0478636c">http://libraries.ucsd.edu/speccoll/dswenttowar/#ark:bb0478636c</a>.
- Share Buttons, Sharing Widget, Sharing Plugin AddToAny 2009, viewed 9 September 2009, <a href="http://www.addtoany.com/">http://www.addtoany.com/</a>>.
- Shirky, C. 2008a, Here comes everybody: the power of organisation without organisations, Allen Lane, London.
- Shirky, C. 2008b, 'It's not information overload. It's filter failure', Keynote presentation, O'Reilly Media, Inc. and TechWeb, Web 2.0 Expo New York, viewed 27 September 2009, <a href="http://www.web2expo.com/webexny2008/public/schedule/detail/4817">http://www.web2expo.com/webexny2008/public/schedule/detail/4817</a>.
- Shirky, C. 2010, Cognitive surplus: creativity and generosity in a connected age, Penguin Press, New York.
- Simon, H.A. 1991, 'BOUNDED RATIONALITY AND ORGANIZATIONAL LEARNING', Organization Science, vol. 2, no. 1, pp. 125-34.
- Simons, M. 2009, *The Contours of the New Google and the Living Story*, Private Media Pty Ltd, Crikey, viewed 29 January 2009, <a href="https://blogs.crikey.com.au/contentmakers/2009/12/09/the-contours-of-the-new-google-and-the-living-story/">https://blogs.crikey.com.au/contentmakers/2009/12/09/the-contours-of-the-new-google-and-the-living-story/</a>.
- Smith, W.S. & Simpson, W.K. 1998, The Art and Architecture of Ancient Egypt, Yale University Press.
- Stafford, B.M. 1996, Good looking: essays on the virtue of images, The MIT Press, Cambridge, Mass.

- Statements of Principles 2009, Australian Press Council, viewed 12 August 2010, <a href="http://www.presscouncil.org.au/statements-of-principles/">http://www.presscouncil.org.au/statements-of-principles/</a>.
- Stenberg, G. 2006, 'Conceptual and perceptual factors in the picture superiority effect', European Journal of Cognitive Psychology, vol. 18, no. 6, pp. 813 - 47.
- Stewart, K. 2007, Ordinary affects, Duke University Press, Durham, N.C.
- Strakowicz, S. 2008, 'Lynch-ing mobiles', Scroll magazine, |vir-tual ... phys-i-cal| edn, vol. 1, no 1, Web Directions, Sydney, Australia, p. 23, <a href="http://scrollmagazine.com/number-1/lynch-ing-mobiles">http://scrollmagazine.com/number-1/lynch-ing-mobiles</a>>.
- Surowiecki, J. & ebrary Inc. 2004, The wisdom of crowds: why the many are smarter than the few and how collective wisdom shapes business, economies, societies, and nations, 1st edn, Doubleday, New York.
- Tan, A. 2008, 'Where does creativity hide?', Talks, Video, TED.com, viewed 17 December 2008, <a href="http://www.ted.com/index.php/talks/amy\_tan\_on\_creativity.html">http://www.ted.com/index.php/talks/amy\_tan\_on\_creativity.html</a>>.
- Tester, K. 2001, Compassion, morality, and the media, Open University, Buckingham.
- The Pierre R 2008, 'My 2004 Mercedes SLK 200K's dash/"speedometer-cluster", Photograpgh, Wikimedia Foundation Inc. Encyclopedia on-line, viewed 25 August 2009, <a href="http://en.wikipedia.org/wiki/File:SLK200K\_2004Model.JPG">http://en.wikipedia.org/wiki/File:SLK200K\_2004Model.JPG</a>.
- Thompson, C. 2008, 'I'm So Totally, Digitally Close to You, Brave New World of Digital Intimacy', The New York Times, Magazine, viewed 5 September 2008, <a href="http://www.nytimes.com/2008/09/07/magazine/07awareness-t.html">http://www.nytimes.com/2008/09/07/magazine/07awareness-t.html</a>>.
- Tudball, L. 2003, 'Human Contraptions', Study guide, viewed 26 February 2006, <a href="http://nfsa.gov.au/collection/film-100%">http://nfsa.gov.au/collection/film-100%</a> australia-collection/program-sales/programs/teachers\_notes/8477humancontraptions.pdf>.
- Tufte, E.R. 1990, Envisioning information, Graphics Press, Cheshire, Conn.
- Tufte, E.R. 1997, Visual explanations: images and quantities, evidence and narrative, Graphics Press, Cheshire, Conn.
- Tufte, E.R. 2001, The visual display of quantitative information, 2nd edn, Graphics Press, Cheshire, Conn.
- Tufte, E.R. 2002, 'London Underground maps (+ worldwide subway maps)', Ask E.T., viewed 24 August 2010, <a href="http://www.edwardtufte.com/bboard/q-and-a-fetch-msg?msg\_id=00005W&topic\_id=1">http://www.edwardtufte.com/bboard/q-and-a-fetch-msg?msg\_id=00005W&topic\_id=1</a>.
- Tufte, E.R. 2006, Beautiful evidence, Graphics Press, Cheshire, Conn.
- Turnbull, D. & Watson, H. 1993, Maps are territories: science is an atlas: a portfolio of exhibits, University of Chicago Press edn, University of Chicago Press, Chicago.
- Tversky, B. 2000, 'Some Ways that Maps and Diagrams Communicate', paper presented to the Spatial Cognition II, Integrating Abstract Theories, Empirical Studies, Formal Methods, and Practical Applications.
- Victor Pickard, Josh Stearns & Aaron, C. 2009, 'Saving the News: Toward a National Journalism Strategy', Report, Freepress, viewed 10 Nov 2011, <a href="http://www.freepress.net/node/57076">http://www.freepress.net/node/57076</a>.
- Vyavhare, A. 2009, Famous Advertising Slogans, Articles Wave.com, viewed 29 April 2010, <a href="http://www.articleswave.com/advertising-articles/famous-advertising-slogans.html">http://www.articleswave.com/advertising-articles/famous-advertising-slogans.html</a>.
- Weick, K.E. 1995, Sensemaking in organizations, Sage Publications, Thousand Oaks.
- Weinberger, D. 2006, Truth vs. Authority, KMworld magazine, viewed 25 April 2006, <a href="http://www.kmworld.com/Articles/ReadArticle.aspx?ArticleID=15163">http://www.kmworld.com/Articles/ReadArticle.aspx?ArticleID=15163</a>.
- Wendy, B., Michelle, L., Alex, T. & Sasha, P. 2010, Spinning the Media: Key findings in a week in the life of the media, Australian Centre for Independent Journalism (ACIJ), Crikey, viewed May 3 2010, <a href="http://www.crikey.com.au/spinning-the-media/">http://www.crikey.com.au/spinning-the-media/</a>.

- Whitesides, G. 2010, 'Toward a science of simplicity', TED Talks, <a href="http://www.ted.com/talks/george\_whitesides\_toward\_a\_science\_of\_simplicity.html">http://www.ted.com/talks/george\_whitesides\_toward\_a\_science\_of\_simplicity.html</a>>.
- WHO 2009, 10 facts on malaria, World Health Organization, viewed 15 July 2010, <a href="http://www.who.int/features/factfiles/malaria/en/index.html">http://www.who.int/features/factfiles/malaria/en/index.html</a>.
- Wicks, R. 2013, 'Friedrich Nietzsche', in E.N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*, Spring 2013 Edition edn, viewed 25 January 2013, <a href="http://plato.stanford.edu/archives/spr2013/entries/nietzsche/">http://plato.stanford.edu/archives/spr2013/entries/nietzsche/</a>>.
- WikiLeaks 2010, *About* WikiLeaks, viewed 1 September 2010, <a href="http://wikileaks.org/w/index.php?title=WikiLeaks:About&oldid=67599">http://wikileaks.org/w/index.php?title=WikiLeaks:About&oldid=67599</a>>.
- Wikipedia 1972-73, 'Pioneer\_plaque.svg', NASA, Graphic, Wikimedia Foundation Inc. Encyclopedia on-line, viewed 28 August 2010, <a href="http://en.wikipedia.org/wiki/Pioneer\_plaque">http://en.wikipedia.org/wiki/Pioneer\_plaque</a>.
- Wikipedia 2006a, 'Broken News', Wikimedia Foundation Inc. Encyclopedia on-line, viewed 14 August 2006, <a href="http://en.wikipedia.org/wiki/Broken\_News">http://en.wikipedia.org/wiki/Broken\_News</a>.
- Wikipedia 2006b, 'Paul Ekman', Article, Wikimedia Foundation Inc. Encyclopedia on-line, viewed 27 March 2006, <a href="http://en.wikipedia.org/wiki/Paul\_Ekman">http://en.wikipedia.org/wiki/Paul\_Ekman</a>.
- Wikipedia 2009, 'You (Time Person of the Year)', Article, Wikimedia Foundation Inc. Encyclopedia on-line, viewed 20 April 2009, <a href="http://en.wikipedia.org/wiki/You\_(Time\_Person\_of\_the\_Year)">http://en.wikipedia.org/wiki/You\_(Time\_Person\_of\_the\_Year)</a>.
- Wikipedia 2010, 'File:Bembine\_Table\_of\_Isis.png', *Bembine Tablet of Isis*, Wikimedia Foundation Inc. Encyclopedia on-line, viewed 21 August 2010, <a href="http://en.wikipedia.org/wiki/Bembine\_Tablet">http://en.wikipedia.org/wiki/Bembine\_Tablet</a>.
- Wikipedia 2011a, 'File:Plutchik-wheel.svg', Robert Plutchik's Wheel of Emotions, Image, Wikimedia Foundation Inc. Encyclopedia on-line, viewed 25 August 2011,

  <a href="http://en.wikipedia.org/wiki/Plutchik%27s\_Wheel\_of\_Emotions#Plutchik.27s\_wheel\_of\_emotions">http://en.wikipedia.org/wiki/Plutchik%27s\_Wheel\_of\_Emotions#Plutchik.27s\_wheel\_of\_emotions</a>.
- Wikipedia 2011b, 'Smartphone', Wikimedia Foundation Inc. Encyclopedia on-line, viewed 31 October 2011, <a href="http://en.wikipedia.org/wiki/Smartphone">http://en.wikipedia.org/wiki/Smartphone</a>>.
- Wilcox, C. 2002, Good Weekend Magazine, Sydney Morning Herald, p. 17, viewed 13 July 2002.
- Winer, D. 2008, 'Point of view is everything', *Scripting news*, weblog, viewed 17 December 2008, <a href="http://www.scripting.com/stories/2008/11/24/pointOfViewIsEverything.html">http://www.scripting.com/stories/2008/11/24/pointOfViewIsEverything.html</a>.
- Wurman, R.S., Leifer, L., Nolan, M.J., Whitehouse, K. & Sume, D. 2001, *Informationanxiety 2*, Que, Indianapolis, Ind.
- Zeki, S. 2009, 'Art on the Mind: Neuroesthetics, and the artist as brain scientist!', *All In The Mind*, Podcast, ABC Radio National, viewed 15 August 2009, <a href="http://www.abc.net.au/rn/allinthemind/stories/2009/2652337.htm">http://www.abc.net.au/rn/allinthemind/stories/2009/2652337.htm</a>.