

ANCIENT DIVINATION PARALLELS NEW MEDIA

Cartomancy in an Interactive Context

by
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For Phil Peters

Abstract

For centuries, the tarot has been an interactive narrative system employing such new media principles as nonlinearity, randomness, modularity, and algorithm. As a visual system employing symbolic “open imagery,” cartomancy facilitates cognitive processes such as analogical thinking, pattern recognition, and communication with the unconscious; processes which serve to foster creativity, intuition, and psychic integration in the participant. The exploration of creating personal meaning through interactivity was explored through the development of a contemporary tarot featuring original photography.

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7 Introduction

- 11 These Days
- A poem by Charles Olson.
- 12 An Eye Toward the Future
- The etymology of “vision” points toward the future.

14 Computational Media
& Divination Systems

- 15 Divination & New Media Parallels
- An introduction to systemic principles of tarot in a new media context.
- 16 Interactive Narrative
- 17 Divination & Designing: Process Correlations
- 17 Does Randomness Byte?
- A bit about the current state of computerized random-number generators and implications for divination.

19 Traditional Tarot

- 20 Structure
- A linear map of the system.
- 21 The Major Arcana
- 27 The Minor Arcana & Qualitative Number
- 30 Layouts
- Making connections between and among the cards, with their ‘positions’ as context.
- 31 Past, Present, Future
- 32 The Celtic Cross Spread
- 33 Clarifying Options
- 34 History of the Craft

37 Purposes of Cartomancy

- 37 Decision-making Tool
- 38 Entertainment
- 38 Intuitive and Creative Development
- 39 Oblique Strategies
- A textual divination deck by Brian Eno and Peter Schmidt that helped inspire Samsara.
- 41 Psychic Integration & Narrative
- 44 Ritual

46 Samsara

- 47 Intent
- 47 Imagery
- 48 Suits
- 49 Number
- 49 Hierarchy
- 51 Duality
- 51 Reversals
- 52 The Cards & Their Themes
- 54 The Major Arcana
- 60 The Minor Arcana
- 70 Classroom Layouts
- 70 Storytelling Spread
- 71 Design Response Card
- 71 Alien Interactive
- 71 Opening Limits

72 Interactivity

- 73 Remembering Interactivity
- Cartomancy requires imagination, a lingering gaze, and openness. This memoir remembers these attributes that made reading as a child an intimate and interactive experience.
- 79 Artist Studio Archive
- A second-semester website where focus and a steady gaze is required for reward.
- 87 Sandbox
- One first-semester 3-D project taught me about the essence of designing for interactivity and foreshadowed an interest in cartomancy.

90 The Unconscious & Interpretation

- 91 White Space
- What is absent is only hidden.
- 94 The Personal & Collective Unconscious
- What they are as defined by Jung and Freud.
- 95 Synchronicity
- Random cards as dispositions in a meaningful complex.
- 97 Quantum Entanglement
- The possibility of a scientific explanation for synchronicity.

- 99 Peirce vs. Jung on Symbol
- Clarifying terms for designers.
- 101 The Logo Tarot
- 102 Archetype
- Symbolic constellations of energetic impulses that are “collective” in their nature and origin. All tarot imagery can be considered archetypal.
- 104 Archetype & Identity: Gen & the Mannequin
- A project exploring the multiplicity of archetypes in female identity.

- 106 Analogical Thinking & Pattern Recognition
- A tarot reading contains analogies within analogies.
- 109 Allegory and the Literalism Prison
- The risky business of allegory.

- 110 On Maps & Objectivity
- Interpreting the objective, and an empirical disclaimer.
- 112 In the Beginning Was the Pink Elephant
- A counter-argument advocating an appreciation of words, beyond typographical considerations, in design education. Cognitive processes in design interpretation.

- 115 Context Is Queen
- Three interdependent types of context create meaning from imagery.
- 117 Plumb
- A video experiment that recontextualizes identical imagery.
- 119 Ersatz
- A modular video project that recontextualizes imagery, and explores the relationship between the medium of the screen and a viewer’s interpretation of content.

- 125 Author-ity and Spin
- In which professional readings are considered.
- 130 The Path of Least Resistance
- A little philosophy about the predictive nature of the cards.
- 132 A Bit About Luck
- A Taoist parable.

133 Conclusion

136 Bibliography

138 Index





INTRODUCTION

The right instruments organize not just the
outer world, but consciousness itself.

— *The New Media Reader*

Sophisticated divination systems employ many dynamic media principles that today we're discovering anew through the capacities and potentials of computer technology.

The impact of the computer on our media, and our minds, is clearly revolutionary. The computer heralds an age where principles of non-linearity, randomness, variability, and interconnectedness, to name a few, are metamorphosing our media, and in so doing foregrounding important aspects of our consciousness that have been devalued by the trajectory of the rationalist arrow. It's useful to remember, or discover, that these principles have in fact been exemplified in ancient media systems like the I-Ching and the tarot.

Coming to terms with processes of computerized media that mirror certain aspects of our consciousness is an exciting task for

designers. It's a domain that begins with structure and ends in poetics. It begins with information and culminates in meaning.

Creating personalized meaning — not only customizing information — is the next important challenge in new media design. The current state of new media interactive narrative attests to the reality that in our new media forms we are, naturally, struggling to find ways to balance randomness with structure, and fluidity with integrity. It's my hope that this study of one ancient system, which has flourished underground since 1350, can serve as an example of successful actualization of these very contemporary and challenging concerns.

Winston Churchill said, "The farther backward you can look, the farther forward you can see." If we mine the subtler treasures

of the past, even those that may have flourished in the shadows, perhaps we as new media designers can discover ways to create fresh future works that capitalize on that rich currency in a new context.

What does it mean to be masterful as a new media designer? We must be fluent in the language that is unique to the computer (no small challenge) and at the same time have some kind of fluency in all the various traditional mediums we are repurposing. One meaning-making framework that infuses almost all creative mediums is that of narrative. Narratives like novels and myths are like contextualized maps, serving an orienting function at the same time that they resonate in the individual to create empathic meaning. Today, because we are ready for it technologically, there is an upswelling of interest and an increasing hunger for successful computer-based narrative. Tarot surpasses contemporary digital interactive narrative in its ability to create coherent, structurally sound, and meaningful user experiences. Here the protagonist is most assuredly You. The setting, the events, the conflicts and characters of the story relate very directly to your personal experience, assuring a personalized depth of significance, and yet a seemingly random plot order does not suffer from fracturing and chaos in contrast to computer-based interactive narrative today.

Tarot works as interactive narrative at the same time that it's employed, most often, as a

divination tool. Divination is commonly defined as the practice of ascertaining information from “supernatural” sources with a formal or ritual and often social character, sometimes in a religious context. *Webster's Online* defines divination this way: 1. the art or practice that seeks to foresee or foretell future events or discover hidden knowledge usually by the interpretation of omens or by the aid of supernatural powers 2. unusual insight : intuitive perception. I'm using definition two. In this thesis, any “supernatural” aspect of divination translates simply to the (even still) mysterious aspects of the mind; those aspects that are currently in hot investigation by cognitive scientists. I define divination as the process by which messages from the unconscious mind are decoded.

The brain is constantly processing 400 billion bits of information per minute, but our conscious awareness involves only about 2000. This is happening in our minds all the time — we're receiving and processing all that information, information that doesn't go away, but just isn't integrated into our conscious awareness. Cognitive scientists believe that, much more than likely, all that information remains in our unconscious. What do we don't know that we know?

The tarot accesses, structures, and integrates that unconscious information; it's a medium that retrieves relevant information from perhaps the most enormous “database” of all, the brain, and then organizes and cre-

ates meaning from that information through interactive narrative.

In our age of digital communication, with its charge of the promulgation and proliferation of multitudinous perspectives, such an integrative pursuit may be of particular interest in and of itself. The mind is a seemingly chaotic system that every individual creatively contends with. The information we are subjected to is undoubtedly multiplied exponentially in our time. An important, imminent challenge of new media has moved beyond access to multiple points of view (we are, happily, achieving that) to successfully integrating multiple points of view within the individual.

In the context of this thesis, it's important to distinguish between sophisticated divination systems like the I-Ching and tarot from simpler methods of divination like flipping a coin or reading tea leaves. Flipping a coin employs principles of randomness to help with a decision process, which can be useful at times.¹ But flipping a coin doesn't help to produce understanding of a situation. It only

serves to break some of the minor stalemates in life. Also, it's by no means a narrative medium or even, really, a system. Tasseomancy (tea-leaf reading) and interpreting Rorschach blots require more imagination, but here correspondences with new media are scant because, while it employs a factor of randomness, no complex algorithms or modularity is involved.

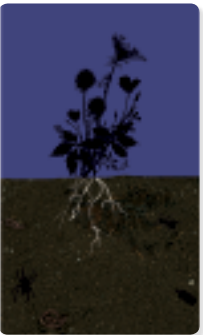
Many people who are unfamiliar with divination systems like the I-Ching and tarot hold an assumptive perspective that such systems amount to mere fortune-telling quackery. As there are technophobes, there are tarotphobes. This prejudice, though, can be grounded in a grain of truth, as any technology risks potential for abuse. Particularly when a reading is performed for one person by another, the potential risk of abdicating personal responsibility for choice-making can shadow and distort the function of divination. Additionally, agendas might be involved that don't serve the best interest of the client. For this reason, throughout most of this document, I approach the divination process as an individual pursuit. Yet even then, although tarot ideally fosters self-reflection and personal authenticity toward decision making, there still remains the potential for the kind of “addictive” dependency that is inherent in any technology: the technology becomes a crutch, instead of a tool. Sometimes it can be difficult to tell when we control our technologies, and when they wind up controlling us.

¹ In “*Foiled By Randomness: The Hidden Role of Chance in Life and the Markets*,” Nassim Taleb calls coin-flipping a “non-linear nudge,” likening it to the tale of the Buridan donkey. He writes, “Imagine a donkey equally hungry and thirsty placed at exactly equal distance from sources of food and water. In [a stalemate] framework, he would die of both hunger and thirst as he would be unable to decide which one to go to first. Now inject some randomness in the picture, by randomly nudging the donkey, causing him to get closer to one source, no matter which, and accordingly away from the other. The impasse would instantly be broken and our happy donkey will be either in turn well fed then well hydrated, or well hydrated then well fed.”

Nevertheless, one of the most interesting benefits of the cartomantic reading process, and a main focus of this thesis, is that it enhances creative thinking. Creativity entails the discovery of hidden orders/patterns inherent in seemingly chaotic systems, as well as their authentic integration in application. The deliberate employment of processes inherent to cartomancy like analogical thinking, “filling in the gaps,” pattern recognition, and the immersion into what Daniel Goleman (*Emotional Intelligence*) calls “the flow state,” all strengthen the creative faculties. Perhaps the creative faculty strengthened most of all is intuition — that “mystery ingredient” so valued by all creatives.

*That which is static and repetitive is boring.
That which is dynamic and random is confusing.
In between lies art.*

— John A. Locke



These Days

Whatever you have to say, leave
the roots on, let them
dangle

And the dirt
Just to make clear
where they come from.

CHARLES OLSON

AN EYE TOWARD THE FUTURE



Consider all the ocular words relating to our sense of the future: **envision** **far-sightedness** **foresee** **foresight** **imagine** (from *image*) **outlook** **seer** **shortsightedness** **vision** **visionary** **visualize**...

The word **vision** emerged circa 1290 as “something seen in the imagination or in the supernatural.” Only in 1491 do we find the first recorded instance of the word *vision* pertaining only to the mechanical sense of sight.

Additionally, the etymology of **see** is “to know.” **Seer**, like *vision*, has subjective etymological roots. A seer was/is something of a clairvoyant: having the power to see events that cannot be perceived by the senses. S/he knows or imagines the future. To *see* is also to comprehend (*I see, I understand*) and to imagine or believe possible (*I see [envision] myself having three kids*).

And to see is also, of course, to apprehend

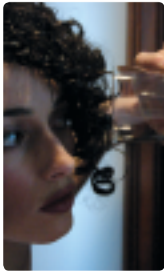
with the eye. The way we define these words at any point in time is dependant on context. Does our environment (internal or external) place a premium on objectivity: form, the quantifiable? Or subjectivity: imagination, the qualitative? Either way, the exegesis of *vision*

remembers its subjective and personal nature.

What could be more integral to our creative nature than the concern with the trajectory of our personal future? At the heart of any consciously creative process, whether it manifests as the epic story of our personal

life or a design project, is foresight and visionary thinking.

Here’s the thing: the future cannot be infallibly quantified in a purely objective manner. Of course, we try! Market trend projection and weather forecasting, for example, are pattern analyses undertaken to



capitalize on the probabilities of the future. What these modern forecasting technologies have in common with divination is pattern analysis evidenced through time. Where they diverge is at that point where imagination and accessing the unconscious becomes integral to the process itself.

Divination reaches as far back into our history as the advent of our imaginations. As soon as we developed imaginations, we began projecting metaphors onto dynamic and random design forms: smoke, clouds, storms, the pattern of bones cast down, tea-leaves,

even slimy guts and entrails (!), apprehending their patterns as signs infused with information about the future. Prejudicially today, we regard such pursuits as superstitious and quaint, or worse. Yet here is a wealth of vital information about our cognitive functioning, the nature of our subjectivity, and the relationship between the perceiver and the perceived. This thesis will explore such matters through a divination form that parallels new media, and why these considerations are vital in the context of visual design.

— Gottfried
All things are full of signs, and it is a wise man who can learn about one thing from another.
The rose laughs at my long looking, my constantly wondering what a rose means, and who owns the rose, and whatever it means.
— Rumi

Computational Media & Divination Systems

Computational Media	Cartomancy
algorithm	layout, ritual
convenience	pocket-sized, portable
customization	personalization
database	the unconscious
interactive	interactivenarrative, communication between conscious & unconscious mind
interchangeable	cards in layout positions, cards in context
modularity	each card
multi-use	decision-making, storytelling, entertainment, meditation, integration
non-linear	the reading process, the random card order
numerical representation	numerology
randomness	true randomness/random draw
reconfiguration	cards in layout
remediation	employs older systems of astrology and numerology
simulation	of possible futures
time-saving	prevent a crappy future today!
variability	philosophical premise is based on change

DIVINATION & NEW MEDIA PARALLELS



For most of recorded history, the interactions of humans with their media have been nonconversational and passive ... This new [medium of the computer] is *active* — it can respond to queries and experiments, so that the messages may involve the learner in a two-way conversation. This property has never been available before except through the medium of an individual teacher.

— Alan Kay & Adele Goldberg
from their essay *Personal Dynamic Media*, 1977

The latter part of this statement, while admirable in spirit, is false. What’s overlooked here is the fact that, for countless generations, divination systems such as the I-Ching, runes, and the tarot have provided a framework within which messages are continuously reconfigured in response to user input. These systems employ shared dynamics with new

media concerns: dynamics that we often mistake (as Kay and Goldberg did) for being brand new.

The medium of the computer is new, and the genres that it breeds are new — genres like computer-based interactive narrative. But although the medium of the computer foregrounds exciting dynamic principles, these principles *have* in fact been employed in the sophisticated divination systems of antiquity. In fact, they may surpass contemporary interactive narrative in their ability to create coherent, structurally sound, and meaningful user experiences.

Tarot shares systemic principles with runes and the I-Ching, but is somewhat more recent in its development: the system is only eight centuries old ♠ as opposed to several thousand years old. I chose tarot as a polestar because it is much more focused on visuality and visual design.

As an oracle (a medium through which understanding or advice is sought) the tarot addresses directly a particular vocalized concern of the querant. Each tarot card, as a module, contains synergistic symbols (for example, the number, the suit, the allegorical scene) that, when contemplated, function to crystallize into depiction an aspect of the querant's unconscious; to bring visible, conscious order to the contents of the unconscious "database." Additional readings are recontextualized according to information received from the previous readings. Through this active feedback loop, the paths the user's thinking follows are augmented.

For a reading that is more in-depth than a single card can provide, multiple randomly drawn cards are arranged in a pre-designed layout. The layout framework ♠ provides a broader holistic view of the situation-in-question, whereby the position of each card reflects a particular aspect of the reader's psychological landscape, a facet of the intricate story. The various positions in a layout can represent an aspect of time (e.g. the past, present or future), a particular hope or fear, the general attitude of your boss, a projected outcome of a certain choice — the possibilities here are infinite — however, what the positions represent are determined in advance through the layout design. The card, then, becomes contextualized according to these aspects. It is the interconnections be-

tween the cards that then formulate a story: a kind of personal mythology. Tarot is a living picture book that changes every time we read it.

The major arcana ♣ (comprised of cards 0-21), when viewed in linear sequence, is a pictorial allegory of any in-depth creative process, such as Jung's process of individuation, a mythological hero/ine's journey, even the process of designing — from 'conception through completion.' This linear sequence



describes the metanarrative. Shuffling the deck, then, and positioning a finite number of cards into a layout, reconfigures this metanarrative into a micronarrative, reflecting the individualized, personal order of our own particular processes as they unfold through our own notion of time.

In reading a spread, the cards may be approached linearly (from position one to position two and so on) and/or non-linearly. It is the process of making connections between (filling in the gaps) and among (discovering associations and patterns) the cards that marks the process as an active, creative process for the participant.

Interactive Narrative

One reason that meaning created for the participant through this process is very often more significant to her or him than the empathic meaning created through computer based interactive narrative systems, is that this

♣ THE MAJOR ARCANA 27

process requires a good deal of imagination; the querant willingly invests more of her imagination and personal experience to illuminate the story, assuring a personalized depth of significance.

A common complaint about computer-based interactive narrative is that it either suffers from fracturing and chaos as a result of a random plot order or, in the case of a completely (narratively) structurally sound system, the resonant meaning generated from the various plot lines is weak or clichéd. It's challenging enough to make one story thread that is "moving," let alone five or twenty-five permutations.

In a good story, every detail is integral and must relate to the totality of the work; this time-honored principle is one of the first sacrificed for the "freedom" of multiple plot lines or orders. In cartomancy, the mind naturally picks out visual details of significance in every card. These details in turn serve as containers for relevant associations ♠, while the layout positions serve a coherent narrative-structuring function.

♠ PEIRCE VS JUNG ON SYMBOL 99

Divination & Designing: Process Correlations

Reading tarot is analogous to designing for a client. In both roles we're interpreters using visual language as a tool for revealing, and for bringing desires to the surface. The client has a good idea of what she wants, even if she doesn't know that she knows. It's our job to

help make sense of the chaotic field of information, pick out what is really important to her or him (*listen*), and help to structure it through visuals. We make connections between what is significant to find the big picture.

Does Randomness Byte?

A significant parallel between divination and computational media is the employ of randomness. Computational media, of course, employ randomness for encryption, to generate samples for scientific studies, and oodles of other purposes that are not new but are now digitized.

Another use for randomness in computer media is plain old fun. I put computerized tarot reading in this category, along with poker and such. I can't see a "virtual reading" as anything but entertainment...yet.

I just don't know who's pulling the strings back there. The thing is, most random generators are not truly random at all, but are based on predetermined algorithms that only *appear* to be random. Any "random number generator" based solely on deterministic computation cannot be regarded as a "true" random number generator, since its output is inherently predictable. If you run the process long enough, the cycle of digits will eventually repeat; a pattern appears. It's really only a simulation of randomness. So if I assume my unconscious might influence the "random draw" of cardboard cards ♥, the same could



not be said for my interaction with a software program, except in the most circuitous way. That connection is lost, and is why I haven't been interested as yet in developing a "new media" tarot interface (tactile considerations, too). Yet these constrictions are loosening.

Generating true randomness is considered one of computer science's most difficult challenges. The world is shot throughout with a tension between order and chaos, but computers are fundamentally designed to be predictable and to generate order. When we need the order of a computer to generate disorder, when chaos needs to be tweaked from the electronic clockworks, it's a very big request.

John von Neumann (a mathematician who developed one of the first pseudo-random number generators: an algorithm called the middle square method) once said, "Anyone who uses software to produce random numbers is in a state of sin." But it seemed the best that could be hoped for; obviously the old methods akin to physically drawing numbers out of a hat (or cards out of a pack) are not nearly expedient enough to keep pace with modern economic time pressures. So developers have been relying on these pseudo random number generators for years, since it is fantastically unlikely (though tech-

nically possible) for a hacker to figure out the underlying pattern.

But guess what? Our growing understanding of quantum physics, in which truly random processes occur, is affording the scientific community a basis upon which to develop *authentic* randomness in a speedy way. Physical random number generators relying on quantum mechanical processes have the advantage that the sequences they produce are completely unpredictable, if we assume that current theories of quantum physics are correct.

The catch right now is that these generation systems are based on real-time physical phenomena¹ and are therefore, at the moment, not quite expedient enough for widespread implementation.

A few websites, such as formilab.com in Switzerland and random.org are offering random strings to the public through these processes. Formilab's website even has a corner devoted to consciousness studies, whereby the use of mental intention in altering the outcome of random events is being studied.

At the moment, however, these sites exist mainly as educational diversions. For now, I've plenty of my own chaos to put to good use in tarot readings.

¹ Examples of phenomena that produce such processes for harnessing include radioactive decay, thermal noise, and shot noise.

Traditional Tarot

tar·ot (tarō) *n.* a system of 78 pictorial cards with an organized internal structure. As a an aid to discernment, a tarot reading is an organizing system for turning one's reality into a story. It's also a game, an arena of play circumscribed by ritual, where the activity shared by reader and querant is the negotiation of a plausible narrative from the randomly-chosen cards. It's a game that functions in part as a discrete activity within the 'magic' circle, but exceeds those boundaries as a system that enforces a structure, an interpretive lens, on that outside world.

STRUCTURE

 ace	 2	 3	 4	 5	 6	 7	 8	 9	 10	 princess	 prince	 queen	 king
 ace	 2	 3	 4	 5	 6	 7	 8	 9	 10	 princess	 prince	 queen	 king
 ace	 2	 3	 4	 5	 6	 7	 8	 9	 10	 princess	 prince	 queen	 king
 ace	 2	 3	 4	 5	 6	 7	 8	 9	 10	 princess	 prince	 queen	 king

Minor Arcana: swords, wands, coins, cups

The Fool 0	The Magician 1	The High Priestess 2	The Empress 3	The Emperor 4	The Fool 5	The Fool 6	The Chariot 7	Strength 8	The Hermit 9	Wheel of Fortune 10
Justice 11	The Hanged Man 12	Death 13	Temperance 14	The Devil 15	The Tower 16	The Star 17	The Moon 18	The Sun 19	Judgment 20	The World 21

Major Arcana

THE MAJOR ARCANA

With every published tarot deck comes a booklet tucked inside the box, outlining themes for all the cards. The traditional meanings purport “completeness” as a set/system. Reference to these meanings is optional in a reading; the imagery alone is enough to stimulate the meaning-making process. It should be noted that no reference was found among the earliest decks; published accounts are in evidence only from the 1800s.

But the reference, or some understanding of the traditional themes, gives another level of richness to reading. The tension between the set meanings (which are, of course, ap-

plied to your own circumstance) and your own initial intuitive interpretations — your initial “take” on the card’s meaning *before* consciously integrating it into circumstance, is a realm of creative potency in itself.

At the same time that the reference always adheres in some way to the long-established, “authoritative” meanings of each card, aspects of the cards’ themes can also vary widely, veering into imaginative tangents that support the particular theme of the deck.

Below are abridged interpretations of the traditional key cards I’ve distilled from my favorite sources and my personal experience.

0 The Fool

Neutral: Embarking on a journey. Innocence. Faith. Full of potential and unaccessed knowledge. Trickster.

Positive: Childlike wisdom. Beginner’s mind.

Negative: Ignorance. Cluelessness. Idiocy. Too much blind faith. Naive.

1 The Magician

Neutral: Awareness that several different perceptions of reality exist. Access to multiple points of view. Moving between the worlds of fantasy and reality with skill, talent, and tricks of the trade.

Positive: Valuable capacity to discriminate and clarify differences.

Negative: A player, fraud or charlatan. Potential mastery ignored in favor of minor theatricality. The absorption of spirit into superficial affairs. Not seeing the forest for the trees. Being too caught up in the parts and losing sight of the whole. Illusion.

2 The High Priestess

Neutral: A medium/receptive channel. Communicating with the subconscious, the collective unconscious, or a higher power. Current between + and – . Intuition. Listen.

Positive: Passive wisdom. Productive meditation. Attunement.

Negative: Isolation from the common world.

3 *The Empress*

Neutral: The power to make. Abundance. Fertility. Caretaking. Creativity. Maternal instincts. Sensitivity. Sensuality. Living from the heart. The mother archetype.

Positive: Devoted to creating through love and nurturance.

Negative: Destroying, devouring, overprotecting, enabling.

4 *The Emperor*

Neutral: Authoritative power structures. Hierarchy. Discipline. Organizing and stabilizing. Consolidating power. Giving up some individuality and freedom to identify with a powerful force or group.

Positive: Eliminating the superfluous to retain only what's true.

Negative: Stifling authoritarianism. Rigidity. Sterility.

5 *The Hierophant*

Neutral: Philosophies. Dualities of teaching/learning. Attitudes toward instruction. Mentoring. Accept you've much to learn and/or teach, yet have complete responsibility for the manner in which you use the information received.

Positive: Acknowledge and approach the wise. Conscientiousness. Leadership; walk the talk.

Negative: Excessive perfectionism, or unhealthy ideals.

6 *The Lovers*

Neutral: Conscious choice. Discriminating to create some kind of union. Being ready to get what you want.

Positive: A productive choice. Understanding that the prerequisites for love are not quite as charming as the fairy godmother scenario.

Negative: Indecision, or an inappropriate mediation, match, or choice. Charm, ease and luck as the enemies of correct choice, which tends to be arduous and sometimes unappealing.

7 *The Chariot*

Neutral: Immersion in a transitional process. Full speed ahead! Focus. Drive. Obsession. Productivity, great output. Rapid change, quick progress.

Positive: Instinctively and skillfully directing a course on an appropriate path. No second-guessing or attempts to control fate allowed!

Negative: Stress and tension from a too-rapid pace. Addiction, obsessive-compulsiveness.

8 *Strength*

Neutral: Some weakness can be transcended. Taming the beast through compassion and courage. Strength through gentleness. Balancing the human, animal and the divine.

Positive: Great force of character: self-control and self-love to overcome a failing. Strength. Willpower. Compassion, patience and courage. Triumph. Fortitude.

Negative: Abuse of power. Insecurity. Fear and giving up. Being beaten by unfair means. Cowardice. Inertia. Defeat. Loss of opportunity.

9 *The Hermit*

Neutral: Integrity. Retreat. Isolation. Guarding your truth. Seclusion. Philosophy, analysis, and perspective. Integration of past events. Maintaining ideals in the face of rejection or ostracism.

Positive: Keeping it real. Being true to yourself. Cultivating wisdom.

Negative: Separating yourself from other perspectives is depriving you of needed information.

10 *Wheel of Fortune*

Neutral: The limits of effort and will. Blind luck. Instability. Accident. Karma. Life is unfair. The mystery of the karmic cycle. Something undeserved befalls—could be good, could be bad.

Positive: Boon.

Negative: Bust. Attempts at justice are baffled by the caprices of fate.

11 *Justice*

Neutral: Equilibrium. Dynamic adjustments. Balancing opposites/dualities. Decisive deliberation. Consulting the ideals of justice, equality, and harmony in order to make the correct decision. Quit pussyfooting around.

Positive: Fairness. Harmony.

Negative: Bending over backwards at too much cost.

12 *The Hanged Man*

Neutral: Wait. Patience. Suspension. Cocooning. Timing. A call for further surrender.

Positive: Appropriate waiting.

Negative: Procrastination. Waiting for an unattainable perfect reality. Hang-ups. Held up. Creative block. Wallowing in self-pity.

13 *Death*

Neutral: Metamorphosis. Compost. Great transformation. Something coming to an end to create a new cycle. Don't take the honors and rewards of this world too seriously, for all will be mowed down and transformed without regard to worldly stature.

Positive: A caterpillar becomes a butterfly.

Negative: Flattened! Unnecessary destruction. Better to rest and assimilate than go through the demanding process of death and rebirth.

14 *Temperance*

Neutral: Alchemy. Art. Using experience to modify and temper your life. Blending. Balance. The whole is greater than the sum of its parts.

Positive: Using creative talents to the maximum. Appropriate processes of combining.

Negative: Trying to mix oil and water, or muddying up your canvas. Not knowing when to stop creating. Let it alone.

15 *The Devil*

Neutral: Ruling out options in favor of structure. Limitations. Boundaries. Restrictions.

Positive: Supportive boundaries and limits — surrounding walls for a safe space.

Negative: Oppression. Solid, secure foundations have become cages. Outgrown ideas or conditions are restricting development. Inappropriate agendas. Enslavement to desires. A period of self-destruction and torment. The ego that rejects grace. Preferring the predicament to removing the shackles. Self-loathing as the most poisonous form of the destructive impulse.

16 *The Tower*

Neutral: Destruction. A fall. Toppling the crown. Removing the ego from power. Change of a core belief.

Positive: Wings will grow while falling. It's positive to see a new truth.

Negative: Catastrophe is immanent; may be able to avert it by correcting failings and exercising some self-control, but it's not likely. It's not time to change self-protective beliefs.

17 *The Star*

Neutral: Principles of gentleness and compassion. A flow of pure energy to be channeled however you wish. Cycles of nature and time.

Positive: Circle of replenishment. Restoration and creativity. Regeneration and recovery, especially from some addiction. Harmonious state of balance. No fear, sickness, or destruction.

Negative: Short-circuiting.

18 *The Moon*

Neutral: Symbolic messages lighting a path.

Positive: Guiding intuition and staying attuned to signals. Reconciliation/integration of the shadow. Facing fears, doubts and hesitations.

Negative: Abdicating responsibility for taking control of your direction in life. The dark side of the moon. Feeling lost. Confusion. Fears. The dark side of the subconscious. Distorted vision.

19 *The Sun*

Neutral: Rekindled enthusiasm. Confidence. Youthful spirit. A sense of freedom. The environment mirrors the inner life.

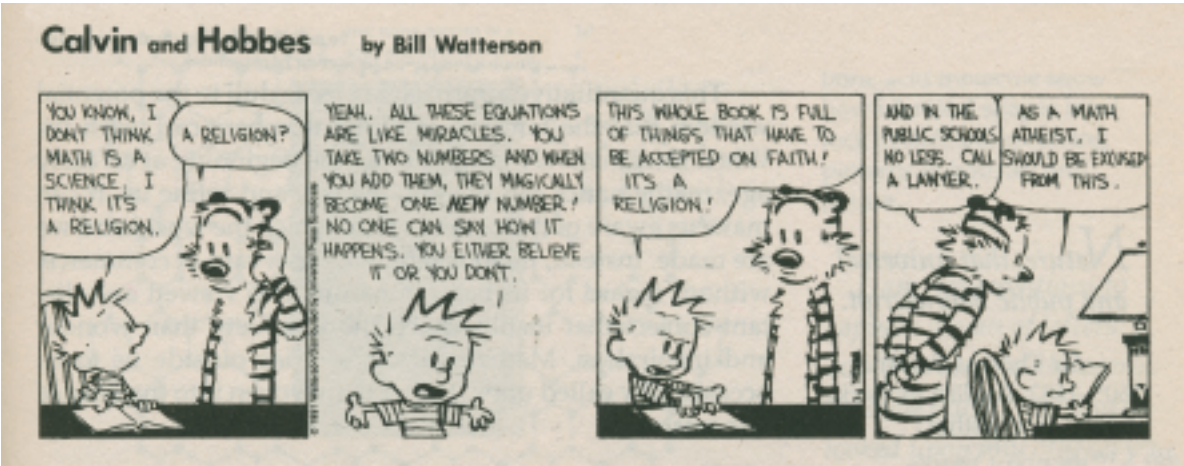
Positive: Personal happiness. Justified high hopes and expectations. Energized by the rightness.
Negative: Self-deception. Doing the same old thing in a new disguise.

20 Judgement

Neutral: Accomplishment. A natural process of maturation. Perhaps a fanfare or ritual; rite of passage. Remember to “chop wood carry water,” because living your “enlightenment” is always an inescapable struggle. Perhaps a sign to elevate or support community.
Positive: The joys of maturation. Rejoicing.
Negative: Obstinacy and a refusal to move with change when change is essential. Fear. Self-doubt and guilt over past mistakes.

21 The World

Neutral: Liberation within multiplicity. Wisdom and integration. Perhaps conclusion of a cycle. Birth.
Positive: The world is your oyster. A long journey happily concluded and a well deserved reward.
Negative: Too many options are open. Too many choices. Multiplicity is not to your advantage. Inertia. Stagnation. Obligations, obstacles, distractions, unfinished work. Lack of vision. Insecure and afraid of change.



Our modern playing card deck evolved from the minor arcana; the entire major arcana was dropped, with the exception of The Fool, which became The Joker. The suits of earth, air, fire and water became ♦ ♠ ♣ ♥ respectively.

In a traditional tarot’s minor arcana, each numbered card in each suit represents a particular aspect of consciousness.

The four suits represent modes of experience:

- earth (pentacles, coins) = physical
- air (swords) = intellectual
- fire (wands) = spiritual
- water (cups, hearts) = emotional

Each tarot suit contains the numbers 1–10 and 4 court cards: the page (or princesses/ knaves), knight (or prince), queen, and king¹. In each of the four suits, the 1s contain many of the same properties, the 2s are similar, the 3s are similar and so on. The court cards usually suggest people with predominantly feminine or masculine, young or mature characteristics.

The properties of number in tarot don’t represent quantities, but qualities. To understand this qualitative aspect of number,

¹ The princess / page / knave was nixed in transition to the standard playing-card deck as well.

ace



a point
beginnings
raw energy
opportunity
potential

2



line
duality
connection
affirmation
will / purpose
initial understanding

3



plane
perspective
clarification
manifestation
creativity

4



solid
volume
stubbornness
stability
stagnation

5



crisis, change
uneasiness
instability
loss

6



solution
harmony
adjustment
centered
seeing
exaltation

7



feeling
deepening
imagination
mystery
introspection
reorganization

8



order
contraction
repose
retreat
ripening

9



understanding
integration
strengthening
fruition
attainment

10



transition
challenge of
moving to
a new level
end of a cycle

it's useful to peek at structural principles of geometry.

Geometric number patterns are constantly in visual evidence in the structural forms of the natural world: a starfish, the insides of a cucumber, the design of insects...just about anything organic (including us) to various degrees. Intuitively, we take advantage of these structural principles in our cultural forms: 4 legs on a table (stability), a keyhole (opportunity), a six-sided parachute (solution, adjustment, exaltation). It's well known also that such principles underlie many compositions in great works of art, ancient and contemporary, from all over the world.

As these principles are so integral to our natural world, it stands to reason that our brains follow such patterns in constructing our thoughts, from the simplest question to our most advanced philosophies. (Last semester I took a critical studies course that examined many philosophical theories, and was struck by how many have the principle of 3

— as a mediating function between two opposite poles — as their basic structure.)

The essential inherent qualities of number are also the basis for the field of numerology. As a remediated form, tarot has subsumed these principles.

The qualities described in the chart on the preceding page outline the “digital” (discrete unit) aspects of qualitative number. Notice, though, that when considered as a whole, the numbers follow a linear progression of development, from inception to completion.

At 1 something is beginning to open up, at 2 it becomes polarized or forms a connection; at 3, it becomes dimensional, at 4, it becomes stable, at 5 it begins to move, at 6 it restabilizes, at 7 it becomes highly complex, at 8 it grows, at 9 the suit comes to its highest point. At 10, the suit is completed, a cycle has fulfilled itself, and new ideas or elements begin to enter. It is as if at the 10 in any suit, the querist moves on to a new plane of experience.

“Design is but another name for natural law.” — Moses ben Abraham, (1135-1204)



LAYOUTS

A layout, or spread, is a map of the reading you will do. It's a diagrammed plan, an algorithm, of the way you'll lay cards on the table. Each card, each position in the layout, answers one of the questions you will be asking about a particular situation. If your question is brief and well defined, you may just draw one card. If you're exploring a multi-faceted issue, the algorithm may contain twelve or twenty cards. More experienced practitioners often develop their own layouts on the fly in order to zero in precisely on key issues.

A spread is a bird's eye view, like a table of contents or a home page. The cards may be approached linearly, starting with the card in position one, then moving on to two and so on, or non-linearly.

If the first level of a reading is relating the randomly dealt cards to their position in your

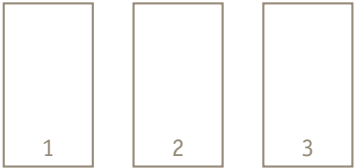


situation, a second level of exploration lies in making connections between the cards. For example, if there are three major arcana cards in a ten card spread, it's interesting to note which facets of the situation these cards are foregrounding, and how the energies of these cards are in interplay. The process of making connections between (filling in the gaps) and among the cards (discovering patterns within the layout pattern) marks the process as an active, creative meaning-making process.

In 1993, I kept a notebook that contains almost all my readings from that year; documenting the process is a great way to learn, and it's delightful to look back some time later and discover the accuracy of your predictions, and the way archetypes played out in and shaped your life.

Past, Present, Future

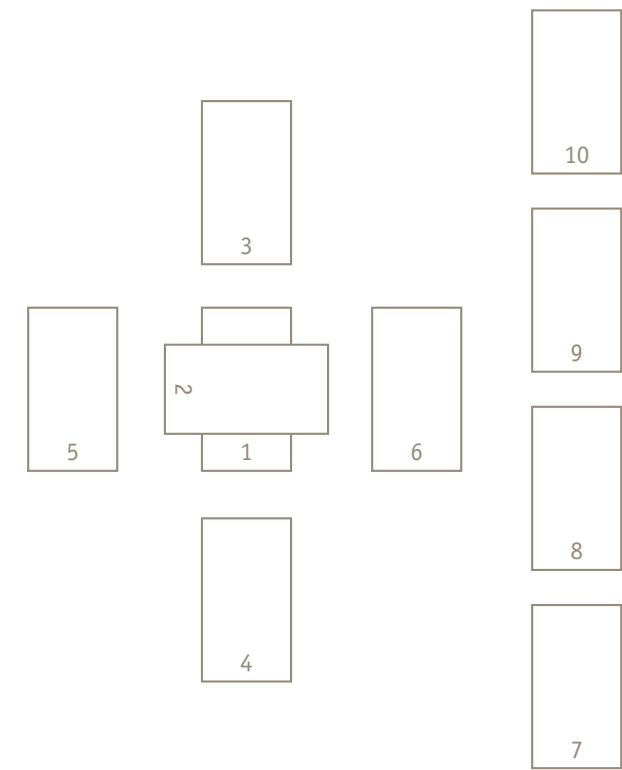
This is a simple line spread that focuses on linear time. It shows how the present is connected to the past and the future. A modification can be created by adding more cards before 1 and after 3...the farther to the left a card is, the farther back in time it represents, and the farther to the right the further into the future.



1. Past, as you remember it
2. Present, as it stands now
3. Future, as it will probably unfold

Celtic Cross

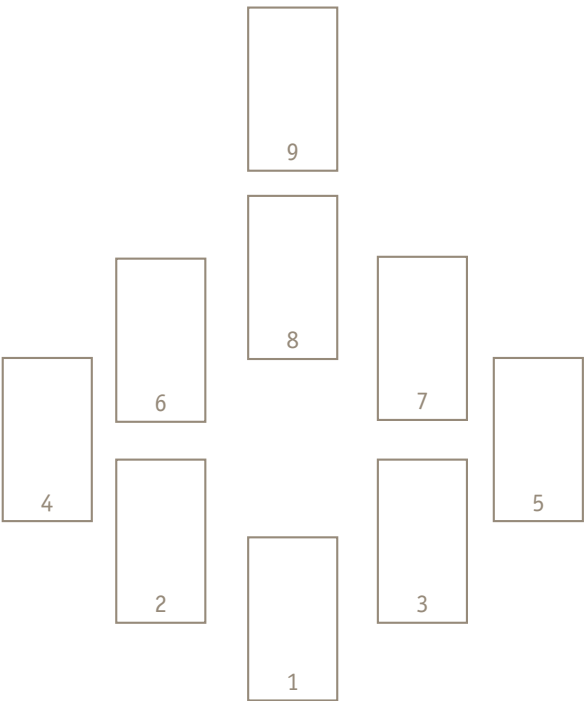
Traditionally, there are many different layout “templates”.
The Celtic Cross spread is one of the best known, and is often taught to beginners as their first layout, despite the complexity of it and the availability of simpler, more easily manageable layouts.



- 1. What covers the person; current situation
- 2. What crosses the person; what fate sends, something that is affecting the situation
- 3. What crowns the person; conscious awareness; what’s at the forefront of the person’s mind
- 4. What is beneath the person; unconscious awareness; what’s hidden in the person’s awareness
- 5. What is behind the person; the past; an influence that is leaving the person’s life
- 6. What is before the person; the future; the probable direction in which the situation will develop
- 7. The person in relation to her future; the strengths or weaknesses she brings to the future; how the person is creating that future
- 8. Family and Friends; how the people around the person feel about the future; how they will affect that future
- 9. Hopes and Fears; what the person fears or hopes will result out of that future; sometimes what we fear is the same thing as what we desire
- 10. What will come; the probable long-term result or outcome of that future

Clarifying Options

When a decision is necessary, you can lay out this pattern for each of the choices and options that you have defined. You may want to lay the cards out again for an option you haven’t thought of yet. Card 3 will tell you about the nature of this option. Spread designed by Gail Fairfield.



- 1. Your reason for considering this option
- 2. What this option represents for you
- 3. The true nature of this option
- 4. Resources that support this option
- 5. Obstacles that block this option
- 6. Advantages of pursuing this option
- 7. Disadvantages of pursuing this option
- 8. What will probably happen if you choose this option
- 9. The Key Factor with regard to this option

History of the Craft

Too many tarot books include this sentence: “*The origins of tarot are shrouded in mystery.*” Most often, these mysteries of origin are assumed grounds that tarot was “divinely inspired.”

That’s nice. But I like debating with fundamentalists who insist every word in the Bible was divinely inspired and therefore “true,” ♠ so I debate this too. Nothing is to say tarot wasn’t “divinely inspired,” although I’m not sure what that means exactly. Even if intelligence of the highest caliber designed the system, our minds *interpret* the cards, and that is the crux of it.

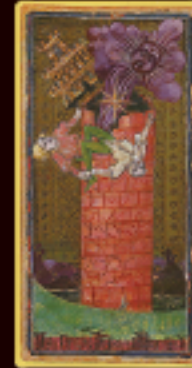
It is true that lack of documentation has found it impossible to determine the precise moment of tarot’s genesis, and whether or not the system was adapted from another card-based divination system from China or Egypt.

What is certain is that the system of tarot with its western iconography was developed in tandem with a popular Italian card game called *tarocco* (the Italian word for tarot) in the period of overlap between the Middle Ages and the Renaissance (circa 1300s). The same cards were used for game playing and cartomancy, but it’s a matter of debate whether tarot as a divination system emerged previously, simultaneously, or subsequently from the card game tarocco.

The earliest tarocco cards were painted in detail by hand and illuminated heavily with gold leaf for very wealthy families, as this was before the invention of moveable type in the West (1450s). Cheaper copies from woodcuts (block printing) or stencils were made shortly thereafter. With the advent of the Gutenberg press in the 15th century, the publication of playing card/tarot decks became more widespread and profitable. It appears that although the tarot originated in Italy, the widespread printing and publication of the cards occurred mainly in the south of France.

It seems very likely, though not definitively proven, that the medium of playing cards was introduced to Italy from China; Tarocco began to appear in Italy soon after the return of Marco Polo from his travels there in the 13th century. At this time in China, playing cards were already being printed on a moveable-type press. Clay moveable type was invented in there in 1041. Woodblock printing had been in use in China since the 6th century. Contrary to what I’ve been taught in school, metal (brass) moveable-type presses were already “invented” and operating in Korea by 1234.

Some scholars believe that playing cards arrived in Europe from Egypt in the 1300s; card decks were flourishing in Egypt at this time that contained four suits, like tarocco.



One of the oldest extant tarots: the Visconti-Sforza. Handpainted (probably by Bonifacio Bembo) on heavy cardboard. Mid-fifteenth century Milan, c 1450.

It's still a matter of debate. No one really knows if Italy discovered cards through China, Egypt or both — just that playing cards “showed up” in Europe in the 1300s.

The original game of tarocco, with its similarities to our modern game of bridge, is still enjoyed in parts of Europe today. Our modern playing card deck is a direct descendent of these Tarocco decks: retaining the four suits, but dropping all major arcana cards except The Fool, which became The Joker. Additionally, the 4 knaves or princesses were dropped from the minor arcana (retaining princes, queens and kings), which has knocked the set down from 78 to 52 cards.

Documentation of early divinatory use is rare, but includes records of Italian kings paying cartomancers to employ the tarocco cards for divination in the 15th and 16th centuries, and a series of sonnets written by Merlini Cocai of Venice in 1527 that refer at length to the decks' occult properties.

The French occultists of the late 18th century were much more zealous in their record keeping. Dozens of deck designs and schools of interpretation flourished. Symbols inspired by Egyptian mythology and/or the Jewish Kabbalah were added to the most popular

decks during redesigns of this period, which began the tradition—still very fashionable today—of featuring a different letter of the Hebrew alphabet on each trump, claiming a specific relation with each of the cards' meanings.

The tarot underwent a major revision in the early 1900s, when Pamela Coleman Smith painted the 56 minor arcana cards to contain allegorical scenes right along with the trump cards. Previous to her revamp, which was commissioned by occultist Arthur Waite, the minor arcana cards simply depicted the quantity of suit symbols appropriate to the number of the card; 5 chalices for the 5 of cups, 7 wands for the 7 of wands and so on, similar to the compositions of our familiar playing cards. Until very recently, the famous Arthur Waite claimed exclusive credit for the designs, whilst Pamela Coleman Smith died penniless in obscurity.

By now over five hundred tarot decks are in publication around the world, with author interpretations that have evolved and diversified along with the artwork. Although the structure has not changed, the medium is continuously reinterpreted by artists and philosophers.



PURPOSES OF CARTOMANCY

Decision-Making Tool

Perhaps more than anything, we all want to make the right choices. Cartomancy is a tool for clarifying options, and calculating and discovering possibilities.

It isn't a fatalistic pursuit. It is a problem-posing method: a reading presents a situation-in-question as a problem to be solved. “As the situation becomes the object of their cognition, the naive or magical perception which produced their fatalism gives way to perception which is able to perceive itself even as it perceives reality, and can thus be critically objective about that reality (Pablo Freire, 85).”

As such, it's an activity that, ironically, opposes the prejudices imposed against it. Rather than abandoning responsibility for action in

acquiescence to a “predetermined fate,” ♠ the principles of tarot reading as I describe it place the responsibility for creating one's future squarely in one's own lap.

There are many unique characteristics of this approach toward clarifying options. First, cartomancy is a structured and controlled ritual designed for “seeing” what the unconscious has to say. It may be “right” or “wrong,”

but a more rounded perspective will likely result from hearing its side. In a reading, we see patterns that we are unconsciously predisposed to see, and we learn about ourselves by revealing our predispositions. This knowledge, in turn, modifies our thinking and therefore our behavior through a progressive feedback loop (each subsequent reading con-



tains within it cumulative context of the previous readings).

The consequent understanding of personal behavior patterns allows for a more informed navigation through the choices we confront.

Entertainment

Simply put, it's fun.

Intuitive and Creative Development

Intuitive development can be a motivating factor among practitioners. The process of divination develops the faculty of intuition; systematic divination systems exercise, amplify, and organize the intuitive faculties.

So then, what is intuition? Like so much explored in this thesis, it is impossible to empirically verify.¹ We just don't have the appropriate instruments yet.

Intuition is "the power or faculty of attaining direct knowledge or cognition *without evident rational thought and inference*; immediate cognition (*Merriam-Webster's*)."

Intuition is in play during those "a-ha" moments that characterize so much creative "thinking" in the arts and elsewhere. They seem to occur spontaneously; they "happen" to us. What happens is that information from the unconscious ♦ becomes organized, achieves a critical volition, and emerges into

1 However, experiments in split-brain patients' perception of flashing lights testifies to the "unconscious" yet accurate knowledge of the right brain.

consciousness. These moments seem to occur primarily when the rational, conscious mind takes a backseat, which allows the wanted information to emerge. Personal eureka moments of mine tend to occur in the shower (when I'm only half-listening to the radio) or in the hypnagogic state before sleep. And during cartomancy, of course.

The word intuition breaks down for me as *in learning* (tuition); in the process of receiving knowledge. The word intuition is literally translated as: *to look at, contemplate* (late Latin). I wonder if this etymology is an indicator of meditative process through visuality that were popular at that time.

Popular science correlates the analytical mind with the left brain, and the intuitive mind with the right brain. Those meditative states that William James called "melting moods," or that Daniel Goleman (of *Emotional Intelligence* fame) calls "flow" are states in which we withdraw into this right brain consciousness in a purposeful attempt to facilitate intuitive process. If we are nervous or tense, the left brain declines to permit this withdrawal; it keeps crying "Wolf!" and shattering the mood.

I believe that intuition is a form of pattern recognition at work in the personal unconscious. It's true that when one enters a meditative state, suddenly perceiving connections between things whose relationship had not struck earlier is commonplace. Yet intuition also crops up constantly in the midst of ordi-

nary experience. For example, suppose you meet someone and "have a feeling" that he means someone harm, even though by all outward appearances he is ordinary, even charming. It's positively nothing you can put your finger on. Days later it turns out that he committed a crime and you think, "I just knew it." What could be at work here?

As we've seen in the introduction, the brain is processing 400 billion bits of information per second, while our conscious awareness is only on about 2,000. The other 399,998,00 bits don't just evaporate—they are all there in the unconscious. So, while the brain is taking in all this unconscious information about Mr. X, I'd posit that subconscious communication between the right brain and the unconscious is taking place, simultaneously comparing this subtlest of information with previous situations. This is a recognition of patterns and, like Mapquest's "calculate shortest route" function, the most expedient likely trajectory.

In divination the left-brain ego, who wastes far too much of her time peering at things through a magnifying glass and cannot see the forest for the trees, is offering that other 'you' a code through which it can signal its messages. As a module, each card facilitates associative patterns, yet this pattern recognition effect is intensified when reading a complex spread ♠ .

We also know that creativity involves seeing things in a fresh way. It involves releasing

judgment and pressure. It requires an openness to the unknown, a welcoming of confusion, a willingness to explore without having an agenda, and a tolerance for mixing together strange and wild concoctions of the mind. During a reading we participate in all of these requisites in a structured manner. And in exercising these creative proclivities, we strengthen them.

Oblique Strategies

Oblique Strategies is a cartomancy deck developed by musicians Brian Eno and Peter Schmidt, designed as a tool for overcoming creative blocks. It isn't a visual deck.² Each card contains a sentence or a clause suggesting a strategy to apply toward a creative project: examples of the axioms include, "a line has two sides," and "change ambiguities to specifics." There is no intentional internal structure or hierarchy in the system. The vast majority of the cards address the intellect, some address the emotions, and a few suggest physical action ("Go outside and shut the door," or "In a dark room, quietly"). Schmidt and Eno found that their creative blocks tended to happen under pressure, and that these cards with their creative little maxims stimulated right-brain thinking and creative development. Even the moments taken to indulge in the *process* of divination and to enjoy

2 Pae White added abstract, flat color graphics to the fourth edition, but despite her enormous talent and her fame as a designer, I don't find these graphics very useful.



the synchronistic connections is as much a part of this stimulation as the maxims themselves. *Oblique Strategies* had a hand in inspiring my decision to develop a cartomancy deck that does not follow the traditional structure of tarot, and is slanted toward creative process.

Psychic Integration & Narrative

The disciplinary humanists in this volume are all engaged in foregrounding our cultural confusions, tuning up our sense of existential befuddlement before the scientifically revealed world of the 21st century. They are surveying the wreck of ideologies, coming to terms with the failed promises of print, the horrifying trajectory of the rationalist arrow. They insist that we experience the flickering focus, the slipping away of meaning between the signifier and the signified, that is the intellectual predicament of (our time).

— *The New Media Reader (Introduction)*

Technology and globalization are transforming knowledge practices in all the disparate professions and the arts. Indeed we are all awash in information in all areas of life, challenging the integrative capacities of experts and students alike.

— *Carnegie Foundation report, 2003*

It takes creativity to decipher a personal order from the postmodern jumble.

It is common knowledge that the advent of new media technologies such as the internet has shepherded a “global village” whereby access to diverse points of view is more decentralized and “everyone [with the time and means] is a publisher.”

The dynamics inherent in computational media technology propagate the publicity of

multitudinous perspectives, and is one of its exultant strengths. Yet this all comes in the midst of postmodernism, when incredulity toward metanarratives is the order of the day. *Wikipedia* states that: “In critical theory, and particularly postmodernism, a metanarrative is a grand overarching account, or all-encompassing story, which is thought to give order to historical and personal record. The post-modern condition is characterized by an increasingly widespread skepticism toward metanarratives, such as the unique status of the individual, the boundedness of information, and the march of progress, that are thought to have given order and meaning to Western thought during modernity. A metanarrative can include any grand, all-encompassing story, classic text, or archetypal account of the historical record. They can also provide a framework upon which an individual’s own experiences and thoughts may be ordered. These grand, all-encompassing stories are typically characterized by some form of ‘transcendent and universal truth’ in addition to an evolutionary tale of human existence (a story with a beginning, middle and an end).”

A unique characteristic of our time is the sheer number of metanarratives, or multiplicity of theoretical standpoints, surrounding us. With the ubiquitization of electronic media, the remnants of traditional ideological frameworks are fragmented from their original

contexts and scattered all about us.³ The problem is sorting them out.

In *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* Janet Murray said, “In a global society we have outgrown our ability to contextualize. We are tormented by our sense of multiple conflicting frameworks for every action.” Modern man suffers much less from an impoverishment of multiple points of view than from the difficulties inherent in the process of authentic psychic integration of such multiplicities within the self. We try to grow hybrid mapping systems within us. It’s challenging to cultivate the roots.

Perhaps our fledgling assimilative mediums will mirror and facilitate this psychic integration through new forms of narrative. In 1998, Murray was hoping that “with the help of the imagination [the computer] might become a cathedral in which to celebrate human consciousness as a function of our neurology.” Already at that time — and the trend has only intensified today — interactive narrative and many computer games adopted the device of jumping from one character’s point of view to the next, according to user impulse. This device Murray champions does, in some ways, parallel our neurological functioning. Our minds certainly do flit.

The device enacts the contemporary struggle of contending with multitudinous

perspectives, but does it foster the psychic integration of perspectives, or merely represent our predicament?

The same question can be asked of new media devices like the hyperlink. Obviously, such developments afford us uniquely new paradigms for not only expression, but ways of thinking. New media technologies like these hold intrinsic capacities to foster integrative thinking. But the interconnections evidenced by such features as the hyperlink are only the first step toward integration.

Interconnection (particularly in terms of new media) means to link together through association. It’s one of the most exciting capacities of new media. In contrast, *integration* implies *coordinative* or *unified functioning*.

The hyperlink is well established. The next step is the *organization* of content, and this is beginning to develop and mature in the media landscape. After this, the challenge for new media will lie in the coordinative functioning of disparate information, of highlighting interdependencies—not just connections. Of authentic integration.

This is a function that the dynamic media of tarot performs. In fact, a principal utility of divination systems like tarot and the I-Ching is the psychic integration of a multiplicity of alternatives in order to attain a greater measure of clarity. Here, “the medium is the message (McLuhan)” in that it is the processes involved in reading the cards (the content is secondary) that achieves this purpose.

In a complex reading such as the Celtic Cross spread (page 32), past, present and future (I’m simplifying; these are three of the ten positions) are not only visibly linked but become integrated, as one card is indexical (Peirce) toward another; the *interdependencies* between the past, present and future are highlighted in the reading process. For example, a card in the ‘present’ position is analyzed *as to* it’s relationship with the ‘past’ position; how did this attitude or event from the past shape my present? A card in the ‘future’ position is interdependent with the ‘present’ and ‘past’ cards: how will these occurrences and archetypes from my past and my present shape my future course? These are simplified examples of perception within a gestalt. This is pattern recognition, demanding perception of the interdependencies among abstract elements.

“Going meta” with a reading in order to identify, assess, and strategize about next directions requires “taking account of different dimensions of a problem, seeing it from different perspectives, and making conceptual links among those dimensions and perspectives (Suedfeld et al. 1992, in their report on integrative learning).”

Furthermore, the reading process employs “whole brain thinking”; the left and right sides of the brain are communicating in full throttle. The “right side” of the brain is the portal to the unconscious in a reading. The left side of the brain consciously analyzes the content that emerges. This signifies commu-

nication between the unconscious and the conscious mind. Such interdependent communication, this “bridging of the gap,” fosters their integration. It is pretty standard science to consider, in general, the conscious and unconscious minds to often be excessively separated, even at odds. In some psychological theories of transformation the goal is to bring the conscious and unconscious parts of the mind closer to each other, so that the whole mind may function more harmoniously.

Carl Jung named such psychic harmony *the transcendent function*. He said, “There is nothing mysterious or metaphysical about the term ‘transcendent function.’ It means a psychological function comparable in its way to a mathematical function of the same name, which is a function of real and imaginary numbers. The psychological “transcendent function” arises from the union of conscious and unconscious contents (Jung, *Collected Works Vol. 8*).” An oracular practice is effective in teaching the two minds to work together and to respect each others’ interests.

Storytelling

Because storytelling involves intuitive factors in variables such as character attributes, settings, and plot structure, a fiction writer might use the tarot or other oracles for story guidance.

A project I wish I had the time to create during these days is a series of mixed media panels that tell canonical stories (*Hamlet*,

³ See my paper “*The Impact of New Media on Our Sense of Place*,” 2004.



Genesis, Little Red Riding Hood) through tarot cards; the archetypal situations and qualities depicted in the cards beautifully demonstrate the archetypal nature of storytelling.

And, of course, a tarot spread employed for personal matters turns one's own reality into a structured story; a personal mythology.

Ritual

In all cultures, divination is infused with ritual. It's beyond the scope of this thesis to investigate the purposes of ritual in general. Yet



ritual is an aspect of divination that is enriching, and therefore purposeful, in and of itself, so I will simply share some common formalities of cartomancy,

and how they inform my experience.

Reading itself is time set aside for communicating with the unknown, the mysterious. Although I've been warned not to use the word spiritual in my thesis, it should be said that a conscious participation in an endeavor one considers spiritual in nature can be tremendously enriching.

Preparation can take on a somewhat formal nature. My cards are always wrapped in a cloth. This is common; how very much more poetic is a cloth with its interwoven fibers than a cardboard box! The cloth is folded and wound around the deck of cards, so "unwinding" the cloth to expose the cards involves a physical motion of the cyclical,

which mirrors cyclical processes of nature and time.

Shuffling: the physical, repetitive, rhythmic motions of shuffling the deck (while formulating a precise question) aids a transition to the flow state. Shuffling is one of my favorite parts of reading. It helps to still the mind while focusing on a query, whereby the mind is very consciously connected to the hands; there is the intimate feeling that the hands holding the cards contain wisdom. One cannot will the "correct" order of the cards through shuffling, only intend it, so there's a feeling of surrender that transpires: surrender of the conscious mind.

I stop shuffling and place the cards in a stack face down, whenever it "feels right." I guess that's the first use of intuition in a reading. Sometimes it takes so long for my mind to quiet that I will shuffle for five or ten minutes. Usually the feeling of readiness is felt in my hands as a physical sensation; a kind of lightness.

Cutting: By this time my concentration on the question has transcended thoughts and words, but while my hand is resting on the deck before cutting, I reformulate the question into the most condensed words or pointed feeling possible. Only sometimes do I speak them aloud. There is also a rather formalized way that the question is framed. Who, what, or why questions are best. "What do I need to know about..." or "What would be the outcome of..." precede my question

more often than not, but I always add this corny clause at the end: "for the highest good of all concerned." This little clause, which feels more like its very own sentence, helps my ego (or left brain) settle back down where it might begin asserting itself again. It helps to center my intentions aright, which feels protective in the midst of such openness.

With my fingers pressed to the sides of the deck, I wait until I feel that light feeling in my hands again (if I don't notice it after a few seconds, I shuffle again). Then I cut to the left, and put the right stack on top of the left, and draw the cards.

Samsara

Samsara is a Sanskrit word that describes the ever-changing aspect of the universe: all phenomena that is forming and transforming. Many people think of it as the Buddhist name for the place where we currently live — the place we leave when we go to nirvana. But in early Buddhist texts, samsara is not really considered a place, but a process: the tendency to keep creating worlds. The concept of samsara refers to cycles of creation. Of course, the bigger the cycle of time is, the more it appears to be linear. In contrast, nirvana is the ceasing of all cause and effect.



intent As my final DMI project, my original intent was to create a divination deck for artists and designers. A bit like *Oblique Strategies* (page 39), but with imagery and an internal system. It would be well-suited to mirror aspects of consideration in art-making contexts, yet retain a flexibility that also allows for general-purpose readings.

Exploration of change is at the heart of divination practice. Changing the system of tarot to create this deck was odd for me, at first. I had always wished for a deck that contained more contemporary imagery, but as a system, tarot had always seemed to me to be quite flawless.

Yet as I moved past understanding of the structure into genuine analysis of it, I also moved past paranoia that tarot fanatics would burn me at the stake for altering things. In fact, purists would not call this system ‘tarot’ at all, but I’ve decided to label it as such because it was inspired by and draws so deeply from tarot that I feel it is a genetic alteration of the same species.

Tarot always has had the potential to mirror creative process, but in *Samsara* this attri-

bute is foregrounded. The imagery of the (4) *form* card, for example, depicts a ceramics artist shaping a bowl on the wheel. In the context of a simple question like, “what aspect of my project needs the most work right now?” this card might indicate an emphasis on formal considerations, whereas in the context of a question like “what pattern am I stuck in with Mr. X,” maybe there’s an imbalance of emphasis on the physical.

imagery All *Samsara* imagery is original; no stock or professional photography was used. Happily, too, the project became a little bit collaborative. The following cards are based on photos submitted by:

Rebellion, Death, Strength, mend and sensuality:
with Nicole Meinhardt

Idealism: Christine Biegert

generosity: Jon Van

Pedagogy: Sally Lawrence (my mom!)

Patience: Matt Samolis

Tone: Katya Popova

Very traditional tarot decks depict in the allegorical major arcana figures from antiquity. Adrian Frutiger defines visual allegory in

Signs and Symbols, Their Design and Meaning: “The allegory consists of a purely figurative representation, usually a personification of an abstract concept, with the objective of providing a naturalistic illustration of some extraordinary deed, exceptional situation, or outstanding quality. Most of the allegorical figures of Western culture are derived from the mythology of Greece and Rome and given *attributes* in a manner that generally dates back to the Middle Ages or the Renaissance.” Much of *Samsara’s* imagery is allegorical, but has broken with the Grecian/Roman tradition.

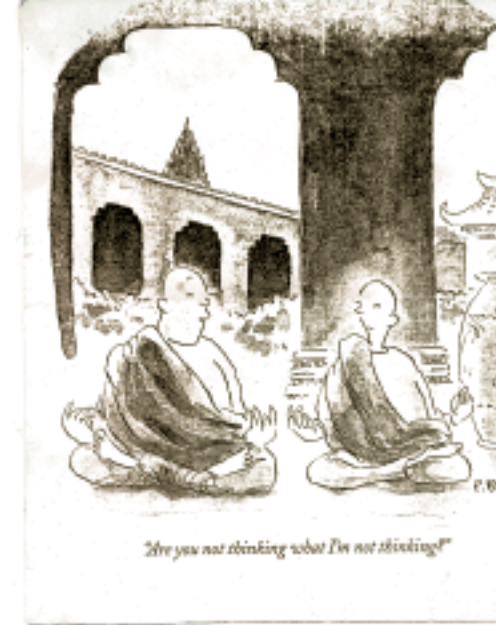
Samsara’s imagery is less esoteric than any deck I’ve seen, with the exception of “spoof” decks like *The Housewives Tarot*. The imagery always references familiar objects from contemporary experience, for there is a wealth of metaphor in everyday objects, and for most people, employing familiar imagery is more approachable than the attempt to contextualize imagery based on life in the fourteenth century. It also encourages more flexibility in its application; for example, use the classroom ♥.

suits In the 1300s, the suit imagery of tarot was contemporary. The tools of the minor arcana were a part of daily life. Swords, for example, are a lovely, apt metaphor for intellect, but it’s the rare individual today who will ever see a sword in real life, let alone use one.

It was tempting to simply “update” the

imagery of tarot, keeping the system and themes intact. An update for the suit of swords, for example, could be knives. One problem with such a switch, however, is evidenced in the quasi-contemporary *Victoria Regina Tarot*, which “updates” swords to guns. Although in the fourteenth century swords were somewhat commonplace, they retained connotations of ritual, ceremony, and service. What guns have to do with this today won’t be debated here. Knives, when employed past the practical, also hold connotations of violence, and I sure wouldn’t characterize cutting food as an intellectual pursuit. I could have transformed swords to pens or the like. I didn’t. I have not designated suits at all. This is not to say I don’t find them relevant in the old system. It is that, with imagery that is less obscure and more contemporary, the designation of suits is not necessary, and may even be counterproductive.

Because the imagery in *Samsara* is in many ways more direct, I believe that a delineation of experiential realm (physical, emotional, intellectual, spiritual) through suits (pentacles, chalices, swords, wands: or some variation of these symbols) would be unnecessarily restrictive. If you draw the (9) *humor* card, for example, who is to say how that quality is being, or shall be manifested? In general analysis, humor does relate most dominantly to the intellect. But in this context, how does that matter? There is physical humor, humor that relieves stressful emotions, and humor



Humor based on spiritual concerns. Not sure of their sources; these cartoons were sent by friends.

based on spiritual concerns. In other words, because humor is *manifested* in each of the four realms *according to circumstance*, pigeon-holing it as “intellectual” would be at best superfluous and at worst obscuring of personalized circumstance. Such directives would interrupt the fluid nature of the system.

number Numerological aspects, however, reveal relevant information without, I feel, being unnecessarily restrictive. As *stages of process*, number clarifies an additional level of qualitative meaning to the cards without restricting experiential domains that are fluid and interconnected.

As described in the chapter “The Minor Arcana and Qualitative Number,” the numbers 1–10 represent a linear process of development. Of course, we don’t always experience these stages in perfect archetypal order. For instance, if you are ‘at 5’ in a project or situation — experiencing instability or crisis —

you might not proceed directly to the adjustment of 6. You might choose to almost abandon the situation altogether and revise it so radically that you are back at the 1 of raw potential. This, of course, is the non-linear aspect of creative process that is mirrored by processes of shuffling and drawing.

hierarchy In card games, higher numbers are usually worth more points. But numbers in tarot represent qualities, not quantities. Higher numbers in tarot can’t be seen as better or worse than lower numbers. Sometimes the most challenging, frustrating, “negative” phases of creative work are experienced in the middle or toward the end of a project. But a structural hierarchy manifests in the major versus minor arcana. Some aspects of situations or situations themselves demand more attention and consideration than others. The major arcana point to strong archetypes, constellations of energy that may have been

building for some time, and that represent major themes. Of course, this is not to say that major arcana cards are “better” than the minor cards. They’re just more intense.

the minor arcana *Samsara*’s minor arcana contains forty cards: four of each number, 1–10. As mentioned, there are no suits. If each grouping by number is considered a set (the set of 1s, the 2s and so on), the variations among the cards in a set represent varying aspects of the quality of that number. For example, geometrically, 2 is *a line* between two points. And so qualitative aspects, or principles of creative development, of the number 2 include duality, connection, affirmation, and initial understanding, whether these principles manifest physically, spiritually, emotionally or physically in the querant. Card themes (names) for 2s in this deck include *intimacy*, *mirror*, *balance*, and *reveal*.

Because there are no suits, the cards do not depict 4 objects in the imagery of a 4 card, but rather an archetypal image that more directly conveys the ‘essence’ of 4.

the major arcana In homage to tarot tradition *Samsara* includes a major arcana, but the themes of almost all the cards have changed. The major arcana can be considered “trump cards”; they carry more intensity and more weight in a reading. In a spread, the presence of a major arcana card often becomes the focal point of a reading, like a sun with minor cards in orbit.

Like the minor arcana, the major arcana includes a linear progression. Here the progression begins with *0 The Portal*, and develops through to *XXI Birth*. As a linear narrative, this is a story of development and maturation.

The traditional tarot’s major arcana is of a quite political nature; one starts out as The Fool or the court jester, and progresses through political stages like the Empress, the Emperor, and the Hierophant (Pope). I have included one card called *Politics*, as that maze is a great archetype to contend with in any creative process, but have done away with any obvious reference to political rank or station.

In changing many of the themes, I have also tried to keep a consistency with the minor arcana regarding qualitative number. Traditional tarot doesn’t always do this. In a standard deck, for example, card V in the major arcana is The Hierophant (philosophies and teaching/learning,) But numerologically, five is instability and great change, usually crisis. A hierophant (an ancient Greek priest), does not exemplify this principle nearly as well as would card a card like traditional XVI, The Tower (destruction) for example. I’ve retained teaching as an archetype in my deck, but I call it *Pedagogy*, because that word contains both teaching and learning. And I place it at nine: understanding, strengthening and attainment. At five I’ve placed *Oppression*, of which the closest correspondence in a standard deck would be *The Devil*.

Some major arcana cards in *Samsara* reinterpret familiar traditional themes while placing them at different points along the spectrum; *IX Pedagogy* in place of V The Hierophant and *VIII Discretion* in place of VI The Lovers (customarily about choice), for instance. Others, like *XII Rebellion*, *XIV Distance*, and *XV The Mulch*, for instance, have no direct parallel to a traditional deck. Cards that reinterpret familiar traditional themes while placing them at *the same* points along the traditional spectrum are: *o The Portal* (0 The Fool), *II The Sensor* (II The High Priestess) *III Compassion* (III The Empress) *X Luck* (X The Wheel of Fortune) *XIII Death* (XIII Death) and *XXI Birth* (XXI The World).

duality Every card contains duality. Any card can be interpreted as positive, negative or neutral. Depending on the context, *6 enable* might portend focusing on the aspect of a project that stresses user experience, or in another context, it could be about complicity in a negative pattern. The image on this card shows feet stepping through a path. If you look closely, you see that the objects in the path aren’t flowers (as some first thought) but eggshells. One challenge in creating imagery for these cards was straddling the line between specificity and abstraction, between revealing too much information (being too literal) and not revealing enough information (being obtuse). *6s* embody aspects of *adjustment*, *solution*, and *harmony*. Here the image of

walking on eggshells might be easy to interpret negatively, but depending on the mindset of the reader, it may not be seen in its negative aspect at all. Maybe she’s tiptoeing through tulips. In each reading, it’s the initial feeling response to the card that will determine its general meaning. The more time spent contemplating a card, the more nuanced, and yet more specific, this meaning will become.

reversals A card that’s turned upside down (a very common occurrence) in a spread is called a reversal. Many people use this random occurrence as another level of informational directive regarding duality in their readings. Customarily there are five methods for dealing with reversals; people tend to choose the method that feels right to them and stick with it.

1. *Inverse*. Some folks interpret upside-down cards inversely. For example, a right side-up *Death* card would mean “change,” whereas a reversal would mean “stagnation.”
2. *Negative*. Others interpret a reversed card more negatively than an upright card.
3. *Negation*. Some see reversals as negating the relevance of the card altogether.
4. *Inner/Outer*. Many interpret reversals as more relevant to one’s inner life, and upright cards as more relevant to outer manifestation.
5. *Ignore it*. My favorite.

major arcana

minor arcana



The Portal
0



Will
I



The Sensor
II



Compassion
III



Politics
IV



Oppression
V



Idealism
VI



The Secret
VII



Discern
VIII



Pedagogy
IX



Luck
X



Greed
XI



Rebellion
XII



Death
XIII



Distance
XIV



The Mulch
XV



Focus
XVI



Tone
XVII



Timing
XVIII



Patience
XIX



Strength
XX



Birth
XXI

1



opportunity



play

2



balance



intimacy

3



generosity



manifestation

4



ego



caution

5



corruption



tangle



paradigm



innocence



reveal



mirror



scarcity



tuning



corporeal



stability



interference



anxiety

6



edit



enable

7



float



edges

8

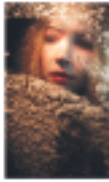


order



camouflage

9



sorrow



interlock

10



joy



convergence



frame



mend



exhume



sensuality



structure



dissect



community



humor



addiction



decorate

The Major Arcana



0 The Portal



I Will



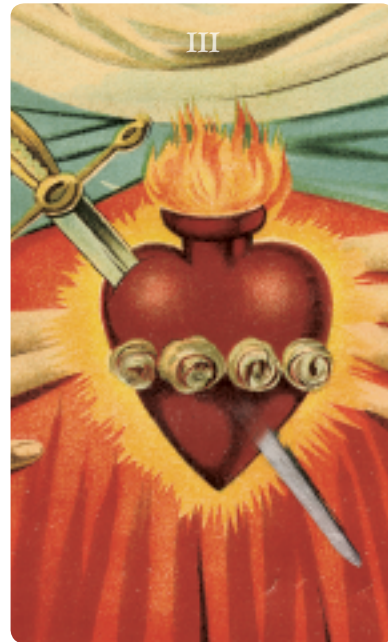
IV Politics



V Oppression



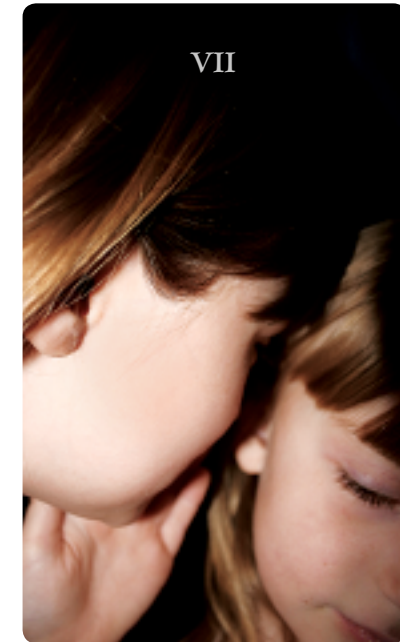
II The Sensor



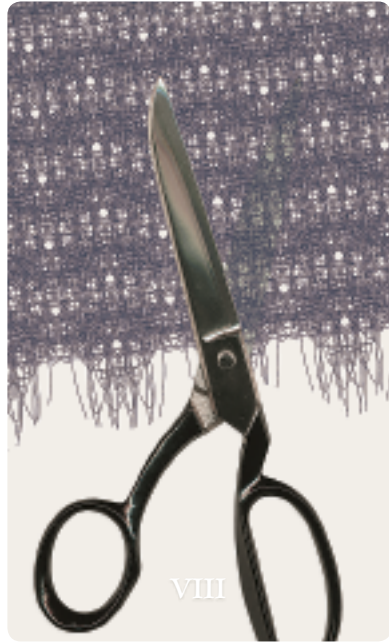
III Compassion



VI Idealism



VII The Secret



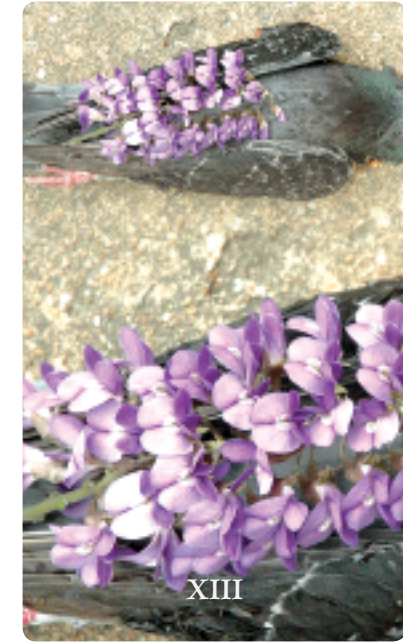
VIII Discretion



IX Pedagogy



XII Rebellion



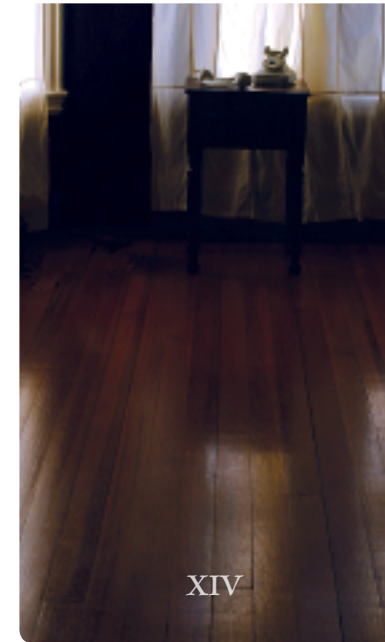
XIII Death



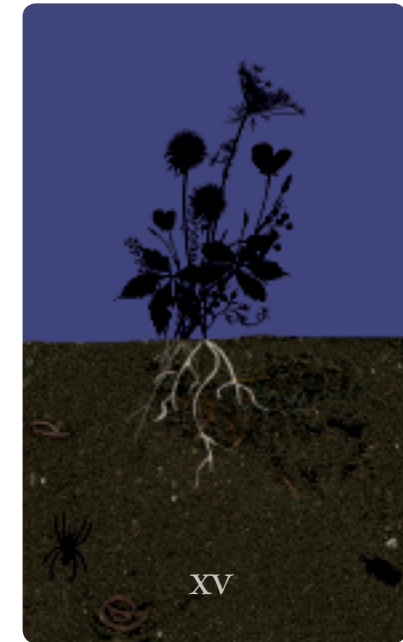
X Luck



XI Greed



XIV Distance



XV The Mulch



XVI Focus



XVII Tone



XX Strength



XXI Birth



XVIII Time



XIX Patience

A point, Beginnings, Inception, *1* Raw energy, Opportunity, Potential



opportunity



play



paradigm



innocence

A line, Duality, Connection, *2* Affirmation, Initial understanding



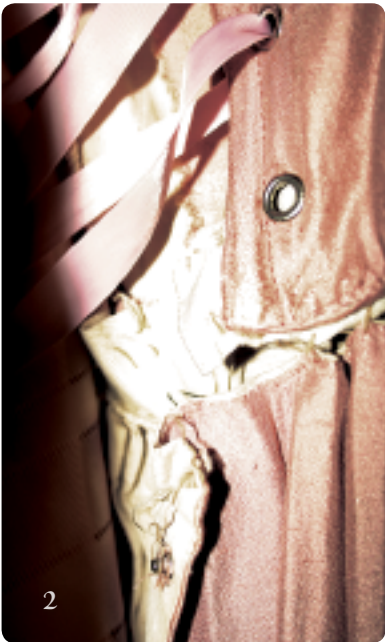
intimacy



balance



mirror



reveal

A plane, Perspective, **3** Fertility, Manifestation



generosity



manifestation



scarcity



tuning

Volume, Solid, Stability, **4** Stubbornness, Stagnation..



ego



caution



stability



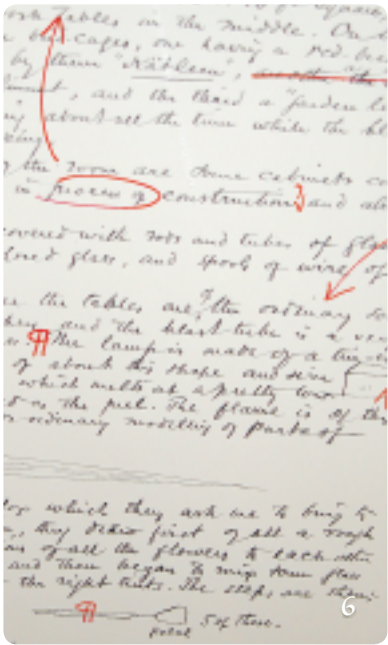
form



interference



anxiety



edit



enable



corruption



tangle



frame



mend



edges



float



sensuality



exhume



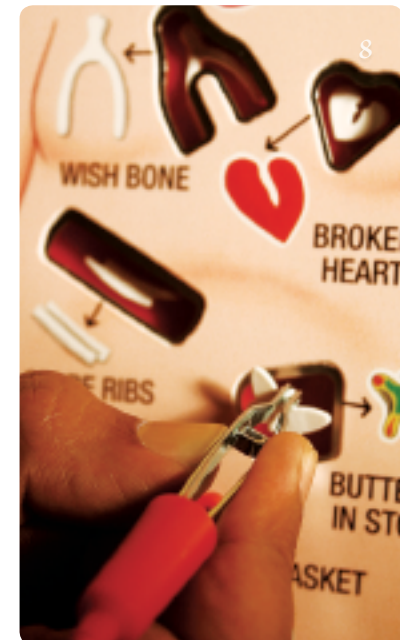
order



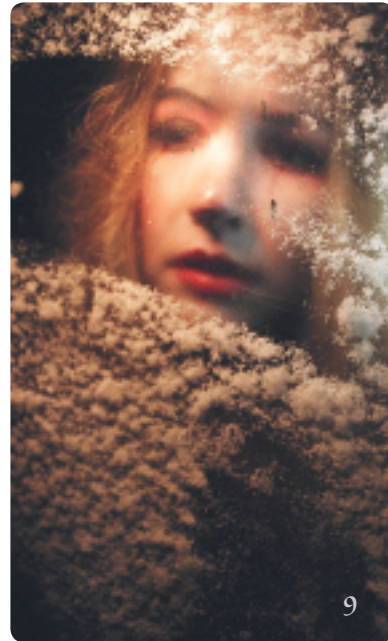
camouflage



structure



dissect



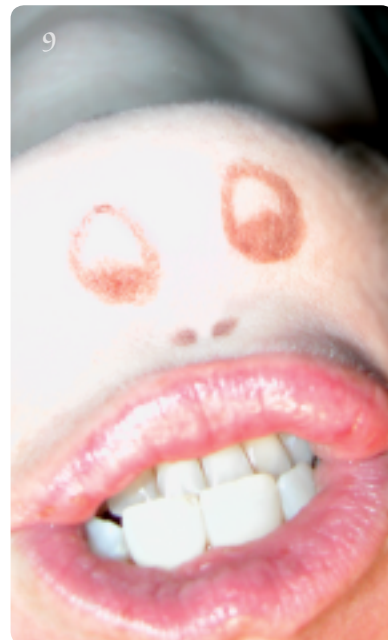
sorrow



interlock



community



humor



joy



convergence



addiction



decoration

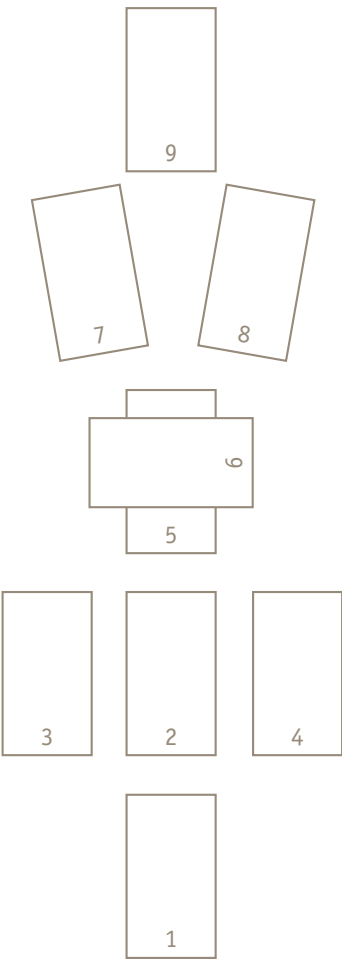
CLASSROOM LAYOUTS

Storytelling Spread

Subjects: Film, Animation, Creative Writing

This spread can be useful in determining quasi-random factors in plot development, providing the student with a number of loose limitations to expedite story development. In a writing class the layout can be used to craft a short story, and in a film or animation class it can be used as an exercise to generate a short.

- 1. The setting / environment.
- 2. The main character.
- 3. A strength of the main character.
- 4. A flaw of the character.
- 5. The main characters' motivation or goal.
- 6. The main conflict.
- 7. A supporting character's personality.
- 8. Time span: the card's number indicates the number of minutes, months or years over which the story takes place.
- 9. Optional: The story's outcome. You might choose not to draw this card, to ignore it, or even to base the outcome on its opposite.



Design Response Card

Subjects: Design, Art

Randomly draw one card. Look at it, quietly. After a full minute, write down a few words about your intuitive response to the card and what you feel its meaning is. Then look at the chart (p. 52-53) to discover the "canonical" theme of the card.

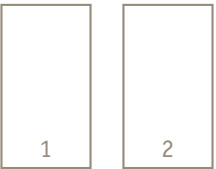
Design something from found objects incorporating **both** your intuitive response to the card and the card's canonical theme, either foregrounding the harmony of the meanings or stressing the tensions between them.



Alien Interactive

Subjects: Design, Art

Make an interactive screen-based or 3-D object defining a human concept for an alien.



- 1. The theme/human concept.
- 2. The personality of the alien species.

Opening Limits

Subjects: Design, Art

For a student having difficulty finding an "angle" for a standard assignment, a randomly drawn card now becomes a portal to a personal theme of the piece. This is a limitation to provide focus.

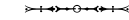


Interactivity

When we use the concept of “interactive media” exclusively in relation to computer-based media, there is the danger that we will interpret “interaction” literally, equating it with interaction between a user and a media object (pressing a button, choosing a link, moving the body), at the expense of psychological interaction. The psychological processes of filling-in, hypothesis formation, recall, and identification, which are required for us to comprehend any text or image at all, are mistakenly identified with an objectively existing structure of interactive links.

— Lev Manovich,
The Language of New Media

REMEMBERING INTERACTIVITY



Remarkably, studies of visual perception have found that two-dimensional images projected onto the retina only achieve full dimensionality as a result of our perception: we infer the third dimension of depth. Sadly, though, as the urge to expedite all communicative transactions usurps our customary patterns of exchange, perception is accelerated as well. There does not seem to be a great deal of time left over to infer—or interpret, or imagine—much of anything at all. In the end, of course, there is nothing real [“real time”] about this at all, except our propensity to let it happen.

— Jessica Helfland, *Screen*

I don’t remember my bottle, and my mom’s not an object even if, until age two or whatever it is, I was under the impression she was. So I think the first interactive object I can truly remember is this kind of thing:



“The farmer says, *moooooo*.” But I didn’t feel close to that toy. It was just kind of neat.

Mom said I started truly reading at around age three. Though I don’t remember the initial learning process, I do remember learning to read in my head.

My brother Billy and I shared a room. We were close, but often engaged separately in our own little worlds. So one day, I was on

my bed reading a book. Sounding out the words. I think he was reading, too. Suddenly there was an exasperated, “Read in your head!”

I stared at him. “Whaddyu mean?”

“Can’t you read in your head?”

“... no ...”

“Just pretend to read out loud. Just move your lips, but don’t make any sound come out. Then you won’t even have to move your lips.”

It worked! The words could be alive without even saying them. I wonder if, after the astonishment of that revelation wore off, I missed the incantation.

The first book I remember really well as

an interactive experience was *Harold and the Purple Crayon*. This was special book: it had no words. It was just Harold and the pictures he drew all by himself. Harold was a rather strange bald little boy, but he drew all the places, and I believed I helped him get there by turning the pages. He was always getting lost and then finding his way back home again. I'd sit in bed, waiting for Mom and Dad to kiss me goodnight. Sometimes I'd sneak my light back on after. I'd look and look into that dark purple world. But He was in full color. I remember my index finger running slowly across the purple sky and stopping over Harold. I was touching Harold. He was very smooth.

By the time I graduated to Dr. Seuss I was reading pretty fast. Mom and I would get silly over the names: Sylvester McMonkey McBean, Zanzibar Buck-Buck McFate, Oliver Boliver Butt!

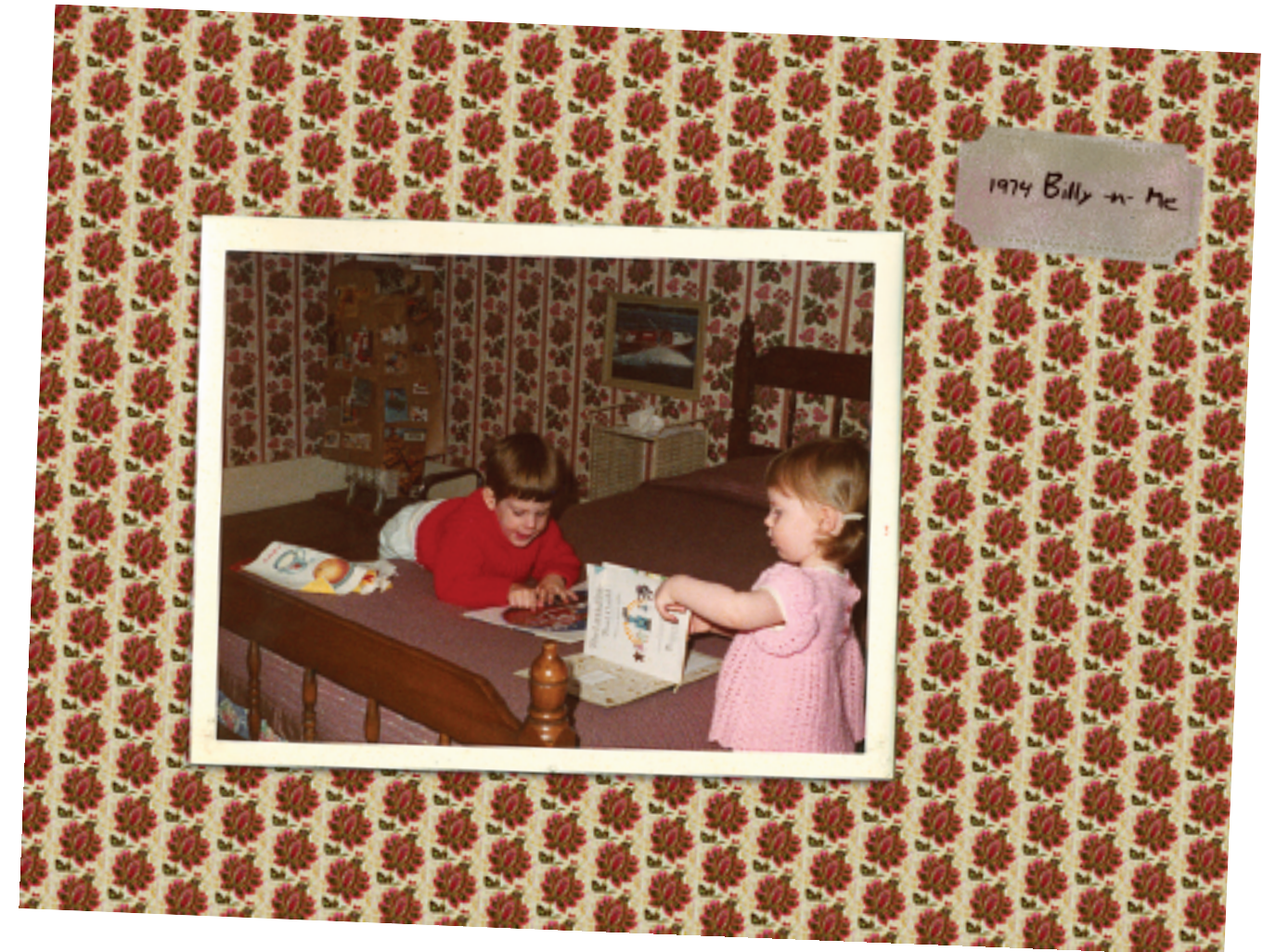
In *The Sneetches* volume, there was a story called *The Pants With Nobody Inside* 'Em. No, I'm wrong — I've brought it down from the shelf — that's just what I called it. It's *What Was I Scared Of?* The “protagonist” tells a story about being scared of the scary pants (scaredy-pants. I just got it.) until he sees that those empty pants were just as scared as he and they became friends. I liked it that I could linger over the pictures to make the story last longer. In one page the little fuzzy



guy looked right at me when he was hiding in a Brickel bush. I projected compassion on him like he was a doll. I always had to finish that story once I started it, because otherwise, I thought, he would stay stuck in the Brickel bush until I came back.

I remember, too, the first time we read in first grade — a group reading experience. We were sitting in a big circle all with the same Little Golden Book. When the first kid began reading, my mouth gaped open. Every single word sounded exactly the same?! Next it was Suzy Ontzo's turn. She did it too! I felt all hot and prickly. I looked at Mrs. Krakeart but nothing seemed the matter. It kept going like that, kid after kid after kid, and then it was my turn. I didn't know what to do, what was wrong with me. So I read it in a monotone, too. I wasn't very focused on the book.

This book was also a less interactive experience, because I had to turn the page when I got beeped at. I loved the story anyway and it's here hanging on my purple wall.



When I reached about seven, I stopped playing with dolls and I didn't believe anymore that story characters felt I was their friend. Nevertheless, I felt loyal to my favorite books. Now I was keenly aware there was a writer behind all this, and I felt "close" to the authors also. Sometimes I was sad at the end of a particularly fabulous book, knowing I wouldn't hear that voice, what she was up to, what she felt, for a long long time. Maybe never, because sometimes an author's next book never came. I lived very close to the library and was allowed to walk there by myself, and Sue the librarian kept tabs for me.

Gradually, I began to discover that these "relationships" really were one-sided. It's corny to be sure, but I wished for some opportunity to give those authors...*something*. It was a quixotic loneliness.

Once, around eleven years old, I drew out stationery and wrote to Jim Davis. To tell him how great I thought Garfield was (!?). He wrote back — I was exhilarated. My stepsister said it wasn't a real signature and smudged it to see. It smeared; it was. That certainly was interactive: the mutable data responded to a query to reveal new information. It was a bit much for my taste. My perception of the letter—what it meant to me—changed over time anyhow, as it would have even if its physical parameters had stayed the same. Static media can be quite kinetic.

In *What Was I Scared Of?*, it's only just now, as an adult, that I appreciate the pun Seuss

snuck in about scaredy-pants. I might never have noticed it had I not been writing this essay. Yet even in a modest read, Seuss tickles adults as well as children because his stories work on multiple levels. As everyone (well, adult everyone) knows, strong political undercurrents reverberate throughout the stories that are more than just *Hop-On-Pop*-style reading primers. This is another facet of book data's interactivity. Levels of alternate meanings crafted into the content itself can be argued "customized" for or to "respond" to different readers with different levels of perceptual, literacy, and intellectual awareness. The content is flexible, mutable, without the necessity of its alternate versions looking different on the page.

The beauty lies in the interplay between the content and the dynamic, evolving mind. This concept contradicts new media's standard categorizations of static versus dynamic media.

Additionally, interplay between layers of meaning brings a person into different conceptual spaces simultaneously. Most obviously with the use of analogy, metaphor and pun ♠, the reader experiences multiple points of view toward the same content, and these multiple meanings act synergistically to create an experience Jessica Helfand calls *textural*. "Texture — and here I am referring not to surface texture but to texture as multiple levels of experience — is complexity made physically manifest. Multimedia, overflowing



A capitalist definition of interactivity. *The Sneetches* by Dr. Seuss.

with complexity (and driven by the user's own unpredictable experience) mostly appears to be anything but."

She goes on to say, "In an overwhelming effort to clarify, texture itself is often greatly diminished, if not altogether destroyed."

Such dynamic, textural experience, however, requires effort on the part of the participant. I'm sentimental about the deeply immersive interactive experience of reading as a child, but the truth is that most often today, I don't allow myself the time to *linger*

that such experiences require. I’m now in the habit and expectation of consuming my media, not engaging with it imaginatively. I wish I were immune to the decline of the steady gaze. I’m not.

There’s no “deep meaning” to the *Harold and the Purple Crayon* series (at least I hope not), just a running theme celebrating the function of our imaginations to create our realities. Without awareness of it, what I appreciated then was this very power. I wasn’t just watching Harold moving through his worlds. They were my worlds too because I was truly immersed; enough to believe I was touching “him.” We were imaginative “together” to make the story live. Like with that *Alice in Wonderland* book & record, it’s now too obvious, too often, when to turn the page. How to get small again like Alice, small

enough to fit through that garden gate to the party?

Tarot facilitates these kind of experiences. Some reasons for this are described in the section *The Unconscious and Interpretation*. There is also this: a wonder that increases, instead of diminishing, with use. Noticeable synchronistic occurrences ♠ open the mind toward wonder. These occurrences are present in a first reading, but over time, what seems like a marvelous fluke becomes something else. How many flukes can occur before it no longer seems like an accident? Because synchronicity is, as of yet ♣, impossible to empirically verify or disprove, we interact with an innocent freshness because we don’t know any better.

♠ SYNCHRONICITY ♠

♣ QUANTUM ENTANGLEMENT ♣

The media ransacks the arts, in its images, in its adverts, in its copy, in its jingles, in its little tunes and journalist’s jargon, it continually offers up faint shadows of the form and invention of real music, real paintings, real words. All of us are subject to this bombardment, which both deadens our sensibilities and makes us fear what is not instant, approachable, consumable. The solid presence of art demands from us significant effort, an effort anathema to popular culture. Effort of money, effort of study, effort of humility, effort of imagination have each been packed by the artist into the art. Is it so unreasonable to expect a percentage of that from us in return? I worry that to ask for effort is to imply elitism, and the charge against art, that it is elitist, is too often the accuser’s defense against his or her own bafflement. When you say ‘This work has nothing to do with me’, when you say ‘This work is boring/pointless/silly/obscure/elitist etc.’, you might be right, because you are looking at a fad, or you might be wrong because the work falls so outside the safety of your own experience that in order to keep your own world intact, you must deny the other world of the painting. The denial of imaginative experience happens at a deeper level than our affirmation of our daily world. Every day, in countless ways, you and I convince ourselves about ourselves. True art, when it happens to us, challenges the ‘I’ that we are. A love parallel would be just; falling in love challenges the reality to which we lay claim, part of the pleasure of love and part of its terror, is the world turned upside down. We want and we don’t want, the cutting edge, the upset, the new views. Mostly we work hard at taming our aesthetic environment. We already have tamed our physical environment. And are we happy with all this tameness? Are you?

— Jeanette Winterson, Art[Objects]

ARTIST STUDIO ARCHIVE

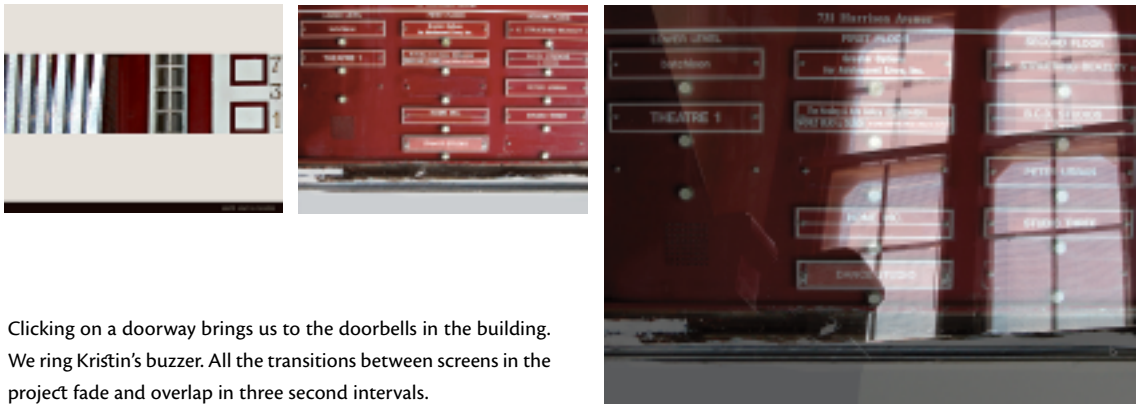


Artist studio entrances in the South End, Boston. The street address of each building is present when the mouse moves over its doorway.

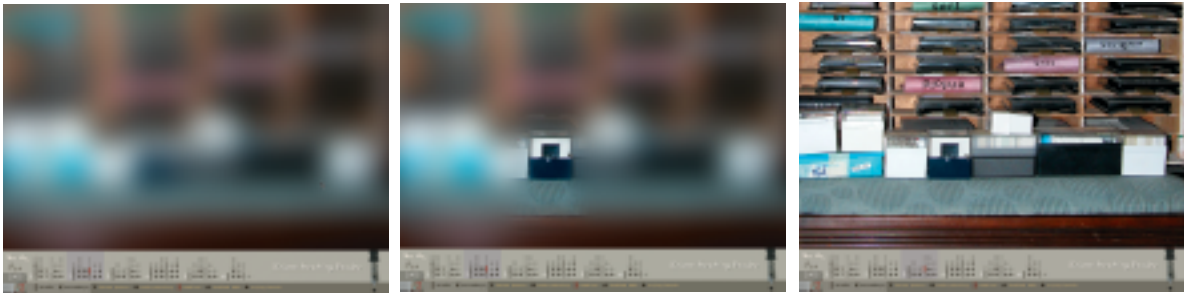
While serving as an archive of the studio and artwork of my friend Kristin Steubing-Beasley, this project explores visual devices of screen-based interactivity. Designed as a prototype, the site is intended to expand to include studio tours of other Boston artists.

I was interested in learning how to design a website interface that requires progressively more careful attention on the part of the perceiver to move forward. In contrast to the ubiquitous website devices that accost the senses while demanding attention, I wanted to create a space that respects the steady gaze.

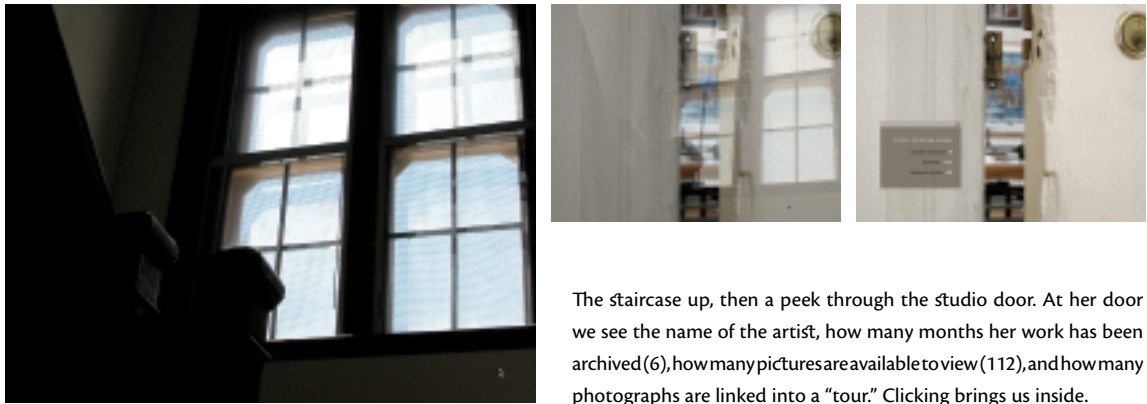
The artists’ work and studio space is archived through time; once a month we would shoot photos, then decide which to include in the “guided tour” and which to add to the database as adjuncts. The design of the navigation bar limits the number of photos to twenty-four per month, and the number of projects to six. The result documents artists’ work not just as finished product, but as creative process.



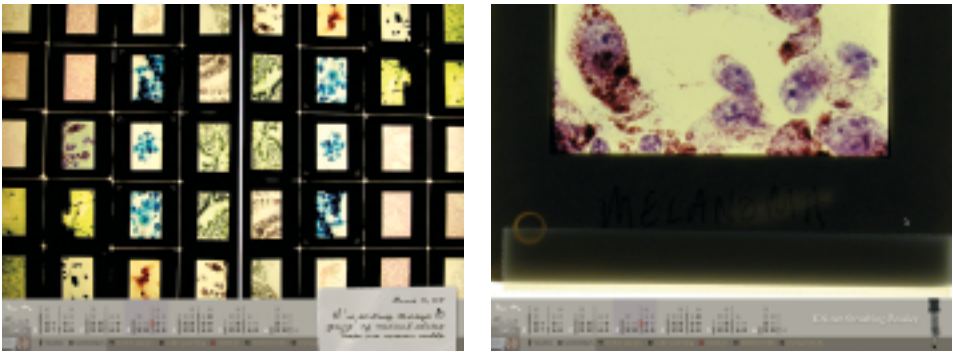
Clicking on a doorway brings us to the doorbells in the building. We ring Kristin's buzzer. All the transitions between screens in the project fade and overlap in three second intervals.



Once inside Kristin's door the tour through her studio begins. There is an option of navigating through the photographs with the calender and coded navigation bar at bottom of the screen, or exploring the image on-screen with the mouse to find a portal through. Here the image is blurry until the cursor finds the spot in which a small area becomes focused. Pressing, then, reveals the whole image (slides on a bench) and releasing the mouse transitions us to a close-up of slides that Kristen has begun to incorporate into one of her projects.



The staircase up, then a peek through the studio door. At her door we see the name of the artist, how many months her work has been archived(6), how many pictures are available to view (112), and how many photographs are linked into a "tour." Clicking brings us inside.



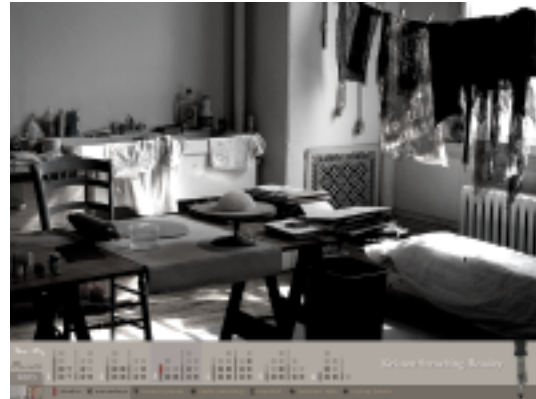
Here, when the cursor finds a certain slide, it grows larger until it fills the screen. On all screens, a pen-tip on the nav bar is also a sweet spot that reveals a handwritten, dated note explaining the relevance of the image in context with her work. Exploration of one image brings us to another in an often non-linear fashion, but the month that the image was archived is highlighted on the nav bar, and the option is always available to explore the site chronologically by clicking on the symbols, organized by project, within the calendar.



Here moving over a desaturated image (detail) in the “studio” category eventually finds a spot that transforms to color. Clicking on the letters leads to a project-in-progress incorporating used typewriter ribbon, with the words typed to her friend still visible (not shown).

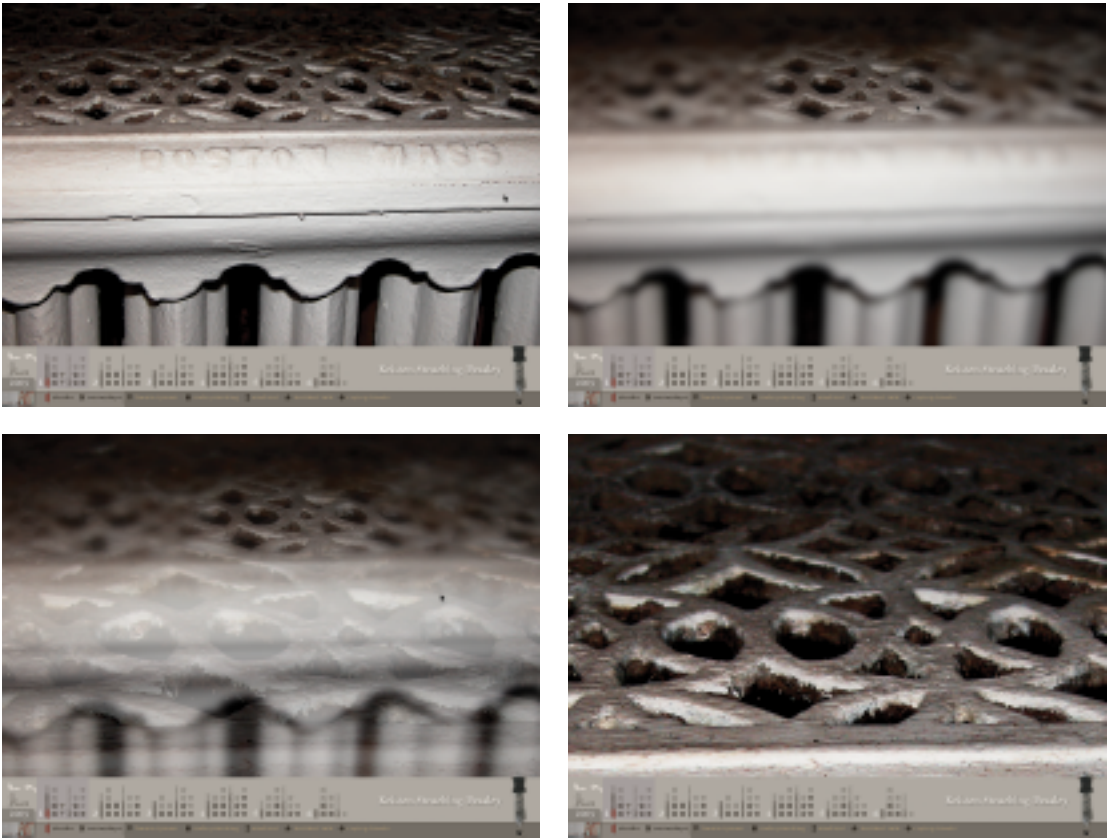


On the navigation bar, the lighter colored symbols denote pictures from the studio or her projects that were archived, but not linked as a part of the “guided tour.”

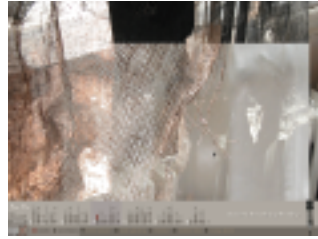
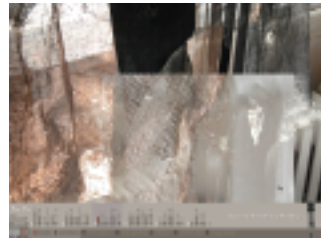


A photo of Kristin’s workstation in March, when moused-over, becomes colorized. Clicking here brings us forward in time to the completed project. If the project interests us, we can click on the symbols corresponding to the project (Crying Bowls) in the navigation bar to explore the project in its various phases through the months.

Another area that colorizes leads us to a close-up. Once there, only careful observation will reveal that tiny bits of fabric are gently moving. Clicking on the wavering threads begins a video-like pan of her window in June.



Another hot-spot was the radiator, which very faintly cycles into a red glow. Once arrived at the close-up, we can find another hotspot through the inverse of a previous device; here when it's found by the cursor, the entire image becomes blurry, with the exception of another detail.



SANDBOX

After eight years as a self-taught graphic designer, I was so saturated with the marketplace-dictated process of seduction eclipsing vacuous content that I decided to go to graduate school. This way, I thought, as I was paying instead of being paid, I'd allow a personal voice to emerge and develop, and create work that positively challenged me and challenged others, too.

I envisioned impassioned theoretical debates, wild inversions of the norm, steady personal progress. Yet through luck or design, I found myself in a small class climate that was nearly the reverse image of my expectations, and so far my work was being proclaimed inaccessible, obscure, and not “clean” looking to boot. Sad emoticon.

But the October day Gunta gave us the “paper bag” assignment in *Design as Experience*, I was sitting next to Lauren waiting for our teacher to show up, saying who-knows-what gibberish about investigating psychological meaning in design: looking beneath the surface of things. “Meaning...ugh, scary,” she shuddered.

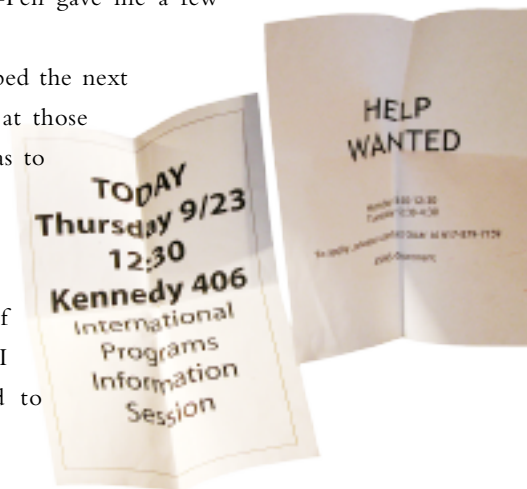
Later in the class, Gunta emphasized the importance of interactivity as a literal, physical activity, and there was (more) mention of “seducing the user.” I’m oftentimes of a rebellious bent, and looking back on it, I was

equating “seduction” with style over substance; a kind of dishonesty, a power game. In the context of design: consumerist, and I was trying to develop apart from that. This project helped me learn that I had a limiting view.

The mission of the evening was to run around campus for ten minutes, snag something interesting, put it inside of a paper bag, and bring it back to class. We suspected at that point we’d be asked to make a response to the object. The theme beginning to emerge in my work was “holes,” so after zooming straight up to the 13th floor, I was happy to find, abandoned on the windowsill and covered in dust, a four inch drill bit!

Alas, upon our re-convergence we all exchanged our bags. I gave Carolin the drill bit (she gave it back to me six months hence at a movie), and Mei-Fen gave me a few fliers.

Sitting in my bed the next morning, staring at those boring fliers I was to create something interactive from that explored the concept of ‘holes’, I knew I (secretly) wanted to



respond not only to the fliers, but to Lauren's orientation toward investigating meaning as well.

I began by playing around with the order of the words. "Help session today / international / apply contact please."

My eyes fell on an outmoded hatbox in my closet. I don't remember where it came from, which only adds to its charm. What kind of hat needed a *box*? Was it frail? Or was it just a clean way of hiding it?

Then the idea for the sandbox checked in. The time-intensive aspect was the making — finding sand, chalkboard spray-paint, suitable-sized cylindrical containers, black sandpaper to line them with, etc, and it was fun rummaging through my apartment to find the fortunes. Putting it all together was a refreshing process for me ... I got to use my hands!



So next class, I placed the (very heavy!) box on the classroom table. On the top of its lid was an antique keyhole (that I'd also had lying around) backed with black velvet. Gunta said it felt like an intriguing, mysterious package waiting to be opened. So far so good!

Someone removed the lid to find that its reverse side is a chalkboard with: "help session today / international / apply contact

please." in chalk.

Because five other people were in my class, I'd made five covered "holes" in the sand by gluing aluminum containers with black sandpaper linings to the bottom of the box.) H-E-L-P, one letter each of four lids, WANTED on the lid of the hole in the center. Almost buried in the sand is a spoon, a tiny spoon that was my grandmother's.

I was hoping the whole inside effect would look a little bit dirty and scary (like a distress signal, from above) but mysterious and inviting too. What would compel a person to dig? The memory of sandboxes from our childhood, when all was imaginative exploration? A little pull of compassion toward whatever's trapped inside? Curiosity that it looks a little forbidding and inviting at once and besides, how can anything bad happen, it's just a friggin' box of sand?

Mei-Fen, a student from Taiwan, was first: she randomly unscrewed one of the lids. More sand. Hmmm. She found the spoon and began to dig. It took a pretty long time; she had to be patient, which made her laugh. Finally metal clinked against metal and she drew out buried treasure: the object she retrieved was a little copper treasure box, with a foreign coin inside. Her work had been about her struggle communicating in a foreign country, so it seemed synchronistic.

Michelle Hiscox went next, and after her adorable focus on digging and digging (the objects were all about six inches down), she

found a tiny umbrella; a kind of dual sword and shield. This undergraduate student created very lovely, personal work that felt very fragile, and she had just been sharing with me how she felt others were "using up" her work, using up her.

Carolin randomly retrieved the key ... apropos in the context of our program—she's the star! And then, Lauren wound up with the big plastic spider pin! Sometimes, it's true, when we dig deeper we don't like what we find.

It turned out that Gunta was last, when only the **WANTED** hole remained. Yet this along with all the others seemed a meaningful coincidence: a chocolate heart. Gunta is the teacher I feel encouraged us to put heart in our work. It took me forever to find that dang heart because it wasn't anywhere near Valentine's Day. But it had to be in the center.

I told the class that what they found was theirs, but Gunta advised us to hold on to everything for documentation purposes.

This was the first project where I felt that perhaps, finally, my heart was a little more accessible, comprehensible. If the interactivity was seductive, it was because my very intention was to address a fear and hopefully somehow convey that maybe the bravery, will, work, and patience involved in digging beneath the surface of things into those shadowy, hidden places, might after all let treasure emerge.

Looking back, this piece foreshadowed my decision to study tarot, where symbology, synchronicity, and communication with the unconscious are foregrounded.



The Unconscious & Interpretation

What we call “psyche” is in no way identical with consciousness and its contents. Those who deny the existence of the unconscious do not realize that they are actually assuming our knowledge of the psyche to be complete, with nothing left for further discoveries. It is exactly as if they declared our present knowledge of nature to be the summit of all possible knowledge. Our psyche is part of nature, and its enigma is just as limitless. We cannot define “nature” or “psyche,” but can only state what, at present, we understand them to be. No man in his senses, therefore, could make such a statement as “there is no unconscious,” i.e., no psychic contents of which he and others are unconscious—not to mention the mounting of convincing evidence that medical science has accumulated. It is not, of course, scientific responsibility or honesty that causes such resistance, but age-old misoneism, fear of the new and unknown.

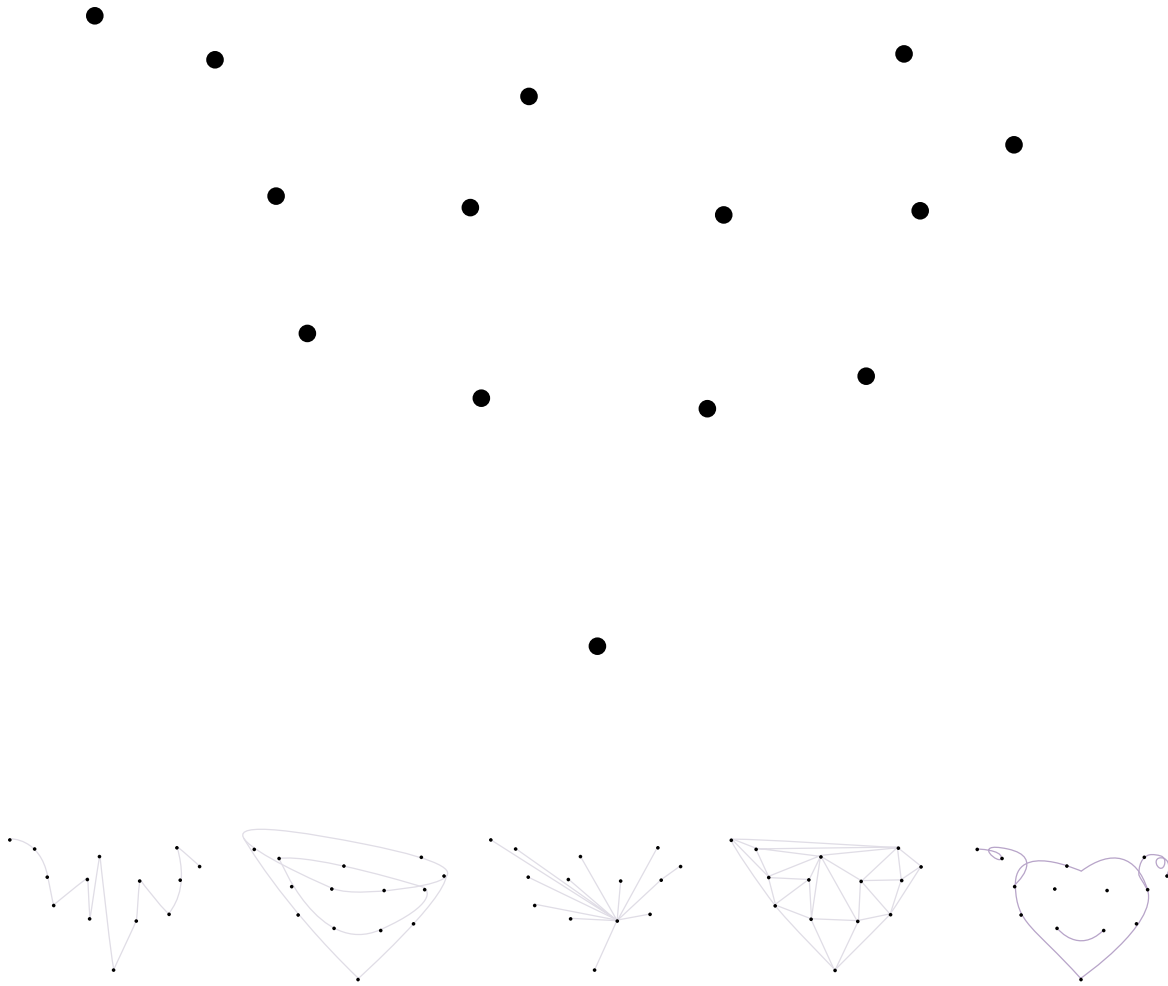
—C.G. Jung, *Symbols and the Interpretation of Dreams*, 1950



Oh my soul! The poem is not made of these
letters which I set in like nails, but of the white which is left
on the paper.
—Paul Claudel

WHITE SPACE

IS ACTIVE



THE PERSONAL & COLLECTIVE UNCONSCIOUS



At the heart of divination process is communication between the conscious and the unconscious mind. Divination is the process by which messages from the unconscious mind (which contains a wealth of information) are decoded.

Freud opened the eyes of the West to the concept of the unconscious. Freud believed that the unconscious has a habit of revealing itself only in symbolic form. His pet portal toward investigation and analysis of the unconscious is the dream and its symbols. In dream analysis, he distinguishes between “manifest content” (images and sounds in the dream) and “latent content.” The latent content are the emotions and complexes that the images and sounds point to; what they truly represent. So, two people might have a dream comprised of similar images, yet because their associations (personal context) with these situations or objects dif-

fer, their meaning differs. In other words, the manifest content are symbols, the latent content is what is in fact symbolized, or the individualized meaning of the symbols. We can also apply this terminology to the symbolism of tarot.



Carl Jung was a disciple of Freud who, as often good disciples do, veered off in a direction that Freud was not pleased with. He certainly agreed with Freud that dream symbols can represent complexes and neuroses, which might untangle and dissolve through dream analysis. But he had a much more respectful view of the unconscious, recognizing it as vital and a wellspring of creativity.

He also believed that, “through our personal experiences of the human unconscious (in dreams, symptoms, fantasies and associations, as well as in art, poetry, music, and image systems such as alchemy, astrology and

tarot) we *participate* in ‘the divine unconsciousness of the world’ (Prof. Michael Pak).” He coined this “divine unconsciousness of the world” the *collective unconscious*. The personal unconscious has its ground in the collective unconscious. The collective unconscious refers to that part of a person’s unconscious which is common to all human beings. In his memoir *Memories, Dreams and Reflections*, Jung states, “The collective unconscious is common to all; it is the foundation of what the ancients called the “sympathy of all things.”

The collective unconscious is a symbol producing realm. But, “the collective unconscious is not a...static repository of symbols,

and neither is it just an inherited basis for...our own personal imagery. The collective unconscious is a living web of interconnections among all people and phenomena, unbound by time or space (Michael Pak).”

Jung found that his healthiest patients continued to dream, but that their dreams took on a different quality; a quality less personal and more universal, more archetypal ♥. He thought that in cases like these, people tap into the collective unconscious more directly.

Because the language of the unconscious is highly visual, symbols of tarot with their archetypal nature are well situated to “bridge the gap” toward communication with the unconscious.

♥ ARCHETYPE 102

SYNCHRONICITY



Nature says few words.

—*Tao Te Ching*

syn·chro·nic·i·ty *n.*

1. The state or fact of being synchronous or simultaneous.
2. Coincidence of events that seem to be meaningfully related, conceived in Jungian theory as an explanatory principle on the same order as causality. (*American Heritage Dictionary*)

Synchronicity infuses chance with meaning through time: time as “a kind of simultaneity [Jung].” When the cards fall spot on, and when you decide to redraw and you wind up receiving the exact same cards, for example, that’s synchronicity.

Carl Jung coined the term. During a six-

year-long experiment of controlled surrender to fantasy life, he perceived and explicated its nature. His subject of speculation was in part inspired by his contact with I-Ching divination. While the pertinence of readings delighted and mystified him, Jung was inclined to agree that it contradicted the obvious laws of physics. This recognition led him to formulate the notion of synchronicity.

The idea of synchronicity is fairly easy to summarize, but the same can't be said for mechanism by which it occurs.

The term refers to psychic/material events that may be separated by distance but are connected in a way that is not causal — with no *apparent* mechanism by which one event creates or affects the other, and not accidental—the co-incidence of the events is not merely randomly generated. Synchronistic information must be transmitted to the individual consciousness by means of the personal unconscious, so it is very frequently manifested outwardly, in events, which are in turn experienced and interpreted.

Jung wrote, “The [knowledge] which is characteristic of synchronistic phenomena, a knowledge not mediated by the sense organs, supports the hypothesis of a self-subsistent

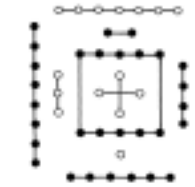
meaning, or even expresses its existence. Such a form of existence can only be transcendental, since, as the knowledge of future or spatially distant events shows, it is contained in a psychically relative space and time, that is to say, in an irrepresentable space-time continuum (Jung, *The Structure and Dynamics of the Psyche* from *The Collected Works*).”

Synchronicity describes — but does not explain — the fact or idea that a tarot spread is not posited at random, but that the cards occupy consequent loci: that they are not chance lots, but dispositions in a meaningful complex.

The exact mechanism by which all this takes place, however, has still not been explained in a satisfying way. But quantum mechanics is getting close.

When we cultivate our awareness of these coincidences, we find them happening more and more, just as anything we give our attention to seems to increase. We stop using the word ‘coincidence’ and call it ‘intuition’. And we think, “well, I can’t control it. It just happens.” But then we remember that when we became curious about it, it happened more often. So perhaps, by nurturing it, we control it indirectly.

QUANTUM ENTANGLEMENT



Let’s get a little spooky. Is it at all plausible the possibility exists that one might see the future? If we understand the future to exist simultaneously within the present, as a probability, it is.

Principles of divination and quantum physics theories have an awful lot in common. Both fields allow for the freedom inherent in the assertion that intangible phenomena are woven into human nature, and consciousness is the ground of all being, all matter. Both fields are mainly concerned with the calculation of possibilities. They are both grounded in a fundamental concept of unity, whereby the past, present and future “exist” simultaneously. And both fields insist that conscious intentionality is a much greater determiner of circumstance than is possi-

ble within the rationalist arrow trajectory. The observer cannot be divorced from the observed; observation contaminates (read: effects) the experiment.



Unconscious, pre-conscious and subconscious content evident in dreams as well as Jungian, Freudian and mystical approaches like divination may manifest as quantum information which reduces to classical (normal) information with each conscious moment. Beyond the idea that the probable future can be accessed in such a manner, the phenomenon of quantum entanglement might give some scientific validation to the idea that we might honestly receive spontaneous information about not only our own goings-on, but those of others.

Einstein famously called entanglement “spooky action at a distance” and he didn’t believe it was possible. It seems he was wrong: since that time, results of quantum physics experiments have overwhelmingly supported the entanglement phenomenon.

Entanglement is a phenomenon whereby quantum¹ states of two or more objects greatly separated by distance are observed to be interdependent. For example, when photons spin left in one studied sample, photons spin right in another sample 200 miles away. Measurements performed on one system seem to be instantaneously — faster than the speed of light — influencing other systems “entangled” with it. There is instant commu-

nication between the entangled photons, indicating each other’s polarization. Naturally this appears inconsistent with the principle of local realism: that “information about the state of a system should only be mediated by interactions with its immediate surroundings (*Wikipedia*).”

At this time, information “bigger” than that on the quantum level (“classical information”) cannot be transmitted through entanglement faster than the speed of light. Nevertheless, information scientists are applying entanglement toward the development of artificial intelligence and quantum teleportation by merging quantum information channels with classical information channels.

¹ **quantum:** [Physics] The smallest amount of a physical quantity that can exist independently, especially a discrete quantity of electromagnetic radiation.



PEIRCE VS. JUNG ON SYMBOL

In a reading, an active engagement with symbols is required. One must engage in *fo-cusing* on the symbols to access knowledge and draw connections, to allow the time and space to read *into* them.

There is a big distinction in the definition of symbol between Charles Sanders Peirce — design’s great guru of semiotics — and Carl Jung, whose definition of symbol works much more elegantly in this context. Such discrepancies should be addressed, as the semantics involved can cause confusion in communication among design professionals.

Peirce (1839 – 1914), a logician and semi-otician whom we designers have inherited most of our vocabulary and theory about signs and such from, classified a symbol as a

kind of sign. A sign being, according to Peirce, any old stimulus pattern that has a meaning. Anything that *stands for* something else. The difference for Peirce is in how the meaning



happens to be attached to or associated with the sign (above).

A *symbol* Peirce defined as the most general kind of sign, which has meaning in the



Words made of letters can be arbitrary in what they represent. Image from “Visible Signs” by David Crow.

absolute most arbitrary way, like the letter combinations in most words, which can be pretty random in what they represent.

Peirce would consider images such as flags and logos symbols, because it’s only through consensus and drilling it into our brains that anyone would have a clue as to what any of them stands for, what they mean.

Jung, on the other hand, conceived of symbol in a completely different way.

Jung would call these logos *signs* for exactly the same reason Peirce would call them symbols. For Jung, a sign intentionally serves to refer to something very specific. A symbol, on the other hand, is never finite or completely fixed. It’s purpose is not con-

crete¹. It’s more connotative than denotive.

What is important is that a symbol, according to Jung, activates the unconscious.

He wrote, “A sign is always less than the thing it

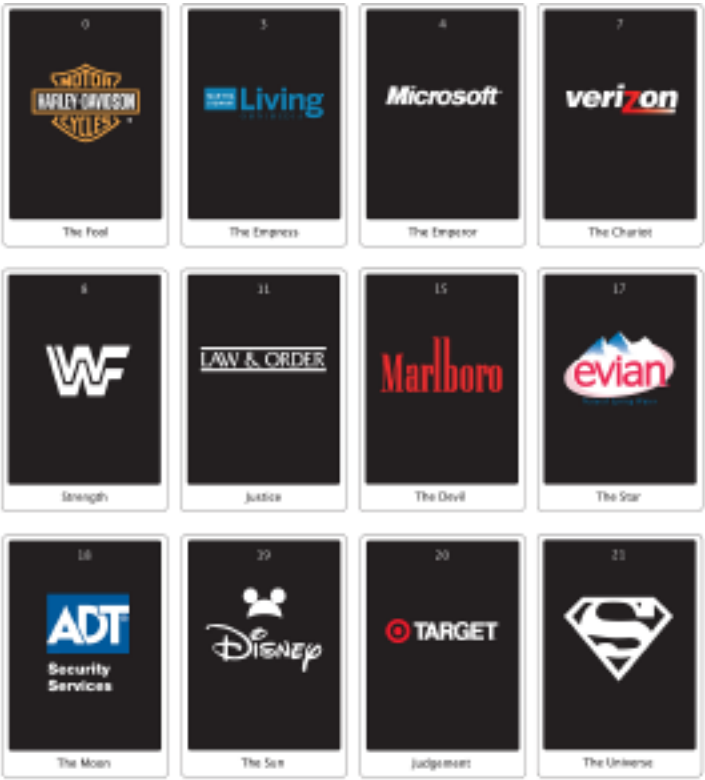
points to, and a symbol is always more than we can understand at first sight. Therefore we never stop at the sign but go on to the goal it indicates; but we remain with the symbol [we linger] because it promises more than it reveals.”

It is more poetry than prose; it can never be fully represented in words. Jung claims that a symbol cannot be invented, that it must emerge in the mind spontaneously. In that sense, it is logical that contemplation of symbol leads us into a dialogue with the unconscious from whence it came.

¹ Jung’s symbol is closer to Peirce’s index, yet there remain important fundamental differences. Even Peirce’s index is intended to point to something without ambiguity; it is denotive, not connotative.

An illustration or sign that is used only to designate or describe a quite specific thing, condition or event can no longer be called a symbol.

—Adrian Frutiger, *Signs and Symbols: Their Design and Meaning*



I made this prototype of a “Logo Tarot” (with celebrities for court cards) as a parody and to foreground the distinction between symbol (as Jung conceived it) and sign (the logos).



ARCHETYPE

Archetypes are specific kinds of symbols that originate in the collective unconscious. They're primordial. They constellate "situations or character types that seem to appear in the collective imagining of many different cultures. In fact, in different mythologies and religions, we encounter variations of the same archetypes (from a lecture by Michael Pak).¹ Archetypes¹ are "the pictorial form of the instincts, for the unconscious reveals itself to the conscious mind in images (Neumann)." The process of their revelation is a matter of nonspecific energetic impulses becoming anthropomorphized.

According to Jung, for every instinctual type of response there is a corresponding image based on the structural dynamic of the impulse. Thus, the basic impulse behind gestation, nurturing, and all other activities one may associate with mothering, gave birth to the image of the great mother in ancient religions, and to *The Empress* in the tarot. In fact, all cards of the

major arcana in the tarot are considered allegorical ♥ representations of archetypes. For example, card 10, *The Wheel of Fortune* (opposite), depicts "fate" as a wheel. Buddhism depicts karma as a wheel. Even slot machines employ a wheel mechanism.

But Jung writes, "These archetypes do not represent anything external, non-psychic, although they do of course owe the concreteness of their imagery to impressions received from without. Rather, independently of, and



sometimes in direct contrast to, the outward forms they may take, they represent the life and essence of a non-individual psyche (*The Complete Works [The Practice of Psychotherapy]*)."

Jung affords archetype the highest status among symbols: "The most important symbols are not individual but collective in their nature and origin (*The Undiscovered Self*)."

Joland Jacobi, in his book *Complex/Archetype/Symbol in the Psychology of C.G. Jung*, writes that archetypes are, "the 'primordial pattern' underlying the invisible order of the unconscious psyche. These 'primordial images,'

which are similar only in their underlying pattern, are based on a principle of form that has always been inherent in the psyche: they are 'inherited' only in the sense that the structure of the psyche...embodies a universally human heritage, and and bears within it a faculty of manifesting itself in definite and specific forms."

Archetypes refer to symbols, but also to stories. One example of an archetypal story is the hero's quest. *The Lord of the Rings*, *Arthur and the Holy Grail*, *Siddhartha*, *Star Wars*...all are variations on this archetypal theme. The linear progression of the major arcana is another variation of the hero/ine's quest, with (0) *The Fool*, setting out in all his youthful exuberance, and progressing through various levels of experience to finally arrive at card 21, *The World*.

The nature of archetypes has interesting implications for creatives. Jung believed that all great art is a variation on archetypal symbols, however creatively and individually interpreted.² And contrary to modern supposition, these themes that we don't invent but are common to all are often the most difficult to successfully render. We're often confronted with this dilemma as designers when depicting universal themes. Do we use stock photography which tends toward

the cheesy, sterile, and sentimental, or invest significant time and resources to render a more unique interpretation, which runs the risk of "failing?" I'm confronting this dilemma right now in the making of *Samsara*. Time pressures are intense and I've forty cards left to design. I have not wanted to employ *any* stock imagery or famous works of art, even for sketches — and not only because it's expensive! But oh, how much more *expediently* things would proceed... Another example: have you ever tried to write a love poem? It is one of the most difficult things to pull off, because love is such a strong archetype.

In another of his lectures, Michael Pak states, "At one level, this idea seems to place a limitation on our creative potential. Many artists would like their work to be expressions of their own individuality, but Jung seems to suggest they are not really "creating" the themes they treat in their work, but are choosing them from the available archetypes. Though one may not invent archetypal themes and symbols, giving them a modern and individual form is no easy task. That, in fact, is where creativity comes in."



The Wheel of Fortune, the Visconti deck, 1350.



My "Luck" card doesn't obviously depict a wheel, but the finding (or lost thing) in the sand is a charm bracelet, which tends to rotate around the wrist.

¹ Carl Jung coined the term.

² the concept of the "artistic genius" as someone manifesting content "completely his own," divorced from common inspirations, emerged during the era when patronage fell out of fashion, and artists had to begin marketing themselves in a different manner in order to make a living.

Archetype & Identity: *Gen* & the Mannequin

In the personal expression of archetype, there is a continuous feedback loop between the projections of archetype that we see all around us in our cultural forms, and the basic, archetypal energetic impulses within us. As such, archetype influences personal identity.

There is a great multiplicity of archetypes, in dynamic interplay, within each individual. In the tarot, this interplay is reflected in the combinations of the archetypal cards: “who we are” at any given moment. At one moment we may be in the role of *The Fool*, at another moment, or even at the same time, we’re *The Emperor*.

Feminine archetypes in the tarot include the princesses and queens of each suit, *The High Priestess*, *The Empress*, *The Star*, *Strength*, and *Justice*¹. Yet cross-cultural archetypes that comprise female identity (femme fatale, madonna, whore, etc.) could constitute an entire set of 78 cards and more.

Gen is an interactive screen-based project made last summer that poses questions about the multiplicity of archetypes that women inherit, through an exploration of the relationship between the female body, archetype, and identity.

There are two versions of *Gen* (from *gender*). In both, the viewer is initially confronted on-screen only with the silhouette of a



Jon's mannequin.

woman. I made no directives, so through intuition or impatience, the user begins to stroke his finger around the trackpad. (Although a touch-screen would be an ideal interface for *Gen*, it was made on and for a laptop.) When a finger moves along the trackpad, a hand (icon) moves over the body of the silhouette. Every inch of the woman’s body, when touched, releases an archetype that corresponds in some way with that aspect of her body. For example, the tender vulnerability of the back of the knee evokes the “waif” archetype. The hair invokes “medusa.”

Version one incorporates both text and imagery (opposite). Gunta Kaza suggested a change: excepting the silhouette, text only. She felt that an absence of imagery allows the participant more imaginative involvement.

This project began at my friend Jon’s photography studio. He had a mannequin there he called Wendy. He joked that he had a crush on her. She was plastic, so he could project onto her whatever he wished. Of course, these projections aren’t limited to mannequins. I had a dry-erase marker, so I began labelling her entire body with words... goddess (belly), shrew (mouth), pussywhipper (index finger), dumb blonde (hair), hag



Version 1. From top left: waif, nymph, medusa, wallflower.

(under the eye), harlot (top of the breast), Daddy’s girl (toes), virgin, mother, crone...

For the silhouette in *Gen*, I outlined my own body. The projections on *Gen* become visible through a participant’s actions, but it’s also implied that she has internalized all these labels, these archetypes; that they *live* in her body and are called forth through interaction. So in version two, I enclosed the figure in a heart, which none of the labels make disappear.

Version 2.



¹ Of course, men carry aspects of female archetype within (anima), as women carry masculine archetypes (animus).



Analogy is the source of humor. Cartoon source unknown.

ANALOGICAL THINKING & PATTERN RECOGNITION

There is something inherently pleasurable about finding a mesh between two superficially unrelated situations. Some basic human joy is triggered by the discovery of unexpected connections.

—Holyoak and Thagard, from *Mental Leaps*

Analogical thinking is a method to creatively understand our world, whether employed through poetic expression, science, fairy tales, or inventive design. Sophisticated divinations systems like tarot and the I-Ching stimulate the creative act of analogical thinking through their processes of systematically comparing one situation or conceptual domain to another, which creates coherent organization of experience, pattern recogni-

tion, and intuitive discovery.

Interestingly, contemporary analogic theories such as structure mapping theory, case based reasoning, and prototype theory are deeply explored in the domains of both psychology / cognitive science, and the artificial intelligence branch of computer science.

Artificial intelligence deals with intelligent behavior, learning, and adaptation in machines. It adopts analogical reasoning toward

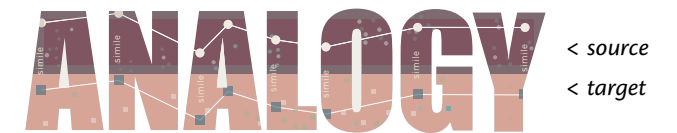
such tasks as facial, handwriting, and speech recognition systems, planning and scheduling, the ability to answer diagnostic and consumer questions, and strategy games like computer chess and other video games.

Analogical reasoning comes naturally to humans. Children create analogies all the time, comparing one familiar situation (the source analog) with an unfamiliar one (the target analog) in order to make sense of the world. Adults create them for similar reasons.

When I was little, my mom would put concepts unfamiliar to me in terms I could understand by telling a story: she made analogies. For example, my brother and I didn't like to drink water. Mom told us we needed more water because we were mostly made up of water.

"No way," we probably said. So first she compared our bodies to the earth, because both contain so much water. This we had seen from globes, so it was a familiar concept. Then she zoomed in on plants. "It's true for plants, too. You have seen drooping plants, right? They get all wilted because the water that holds them up inside is missing. When the water is missing in plants they start to collapse." So in transferring that concept to our own bodies we understood that, like a plant, we'd grow straighter and stronger if we drank lots of water, and we wouldn't droop. In this context, feeding a plant Coke didn't seem like a very good idea.

This very simple example of analogical reasoning can illustrate structure mapping theory: a common way contemporary cognitive and computer scientists frame the study of analogy. According to structure mapping theory, analogy depends on the mapping or alignment of the elements of the source domain (the familiar situation of a droopy plant) and the target domain (the understanding that our bodies are made up mostly of water). The mapping takes place not only between objects, but also between relations of objects and between relations of relations. The whole mapping yields the assignment of a predicate



to the target. A mapping is the systematic set of correspondences that exist between constituent elements of the source and the target domain.

A simple tarot reading contains analogies within analogies. One tarot card contains dynamic imagery that, as the source analog, is intuitively compared with the unfamiliar target analog: the unknown, or the undecided option. The cognitive processes of selecting similes and projecting parallels between the two domains stimulates and informs the pro-

cesses of pattern recognition: the mind recognizes patterns between the card imagery (its ‘message’) and the trajectory of the current situation. Being in this pattern recognition mode of thinking stimulates the illumination of patterns within the reader’s *behavioral trajectory itself*, particularly in a more complex reading.

In other words, the discovery of patterns between the cards in the layout and the facets of the reader’s situation is a method to get at, to recognize, patterns within the reader’s situation/behavior itself. Recognizing these patterns sets the stage perfectly to infer a future outcome in a trajectory.

According to Holyoak and Thagard in their book *Mental Leaps: Analogy in Creative Thought*, analogies are filtered through three kinds of constraints: similarity (common fac-

ets of the situations), structure (the correspondences that can be mapped rather symmetrically), and purpose. “These three kinds of constraints—similarity, structure, and purpose—do not operate like rigid rules dictating the interpretation of analogies. Instead they function more like the diverse pressures that guide an architect engaged in creative design, with some forces converging, others in opposition, and their constant interplay pressing toward some satisfying compromise.”

They also contend that, “Analogy must be recognized as a source of plausible conjectures, not irrefutable conclusions. The success of an analogy must finally be judged by whether the conjectures it suggests about the target analog prove accurate and useful.”

In other words, sometimes creative analogic leaps succeed grandly, and sometimes they fail dismally. Regardless, analogical thinking is a very potent exercise for inventive design. Alexander Graham Bell followed the source analog of the human ear to create his target analog, the telephone. He wrote in his notes, “Make transmitting instrument after the model of the human ear. Make armature the shape of the ossicles. Follow out the analogy of nature.” Graphical computer interfaces (GUIs) are compared with desktops. Through the transferal structural features of a burr on a shrub, the parallel of Velcro was created.

Yet when we venture into the domain of the computer in analogic applications in AI,

we see that there are big differences between the creative capacities of humans to form analogies and the the “intelligence” capacity of the computer. Computer applications demand that there are some identical attributes or relations at some level of abstraction within the domains. Human analogy does not, or at least not apparently. What is this divide between the analog and digital?

The word ‘analog’ has a few definitions, as you may have noticed.

an·a·log 1 [*n.*] Something that bears an analogy to something else. 2 [*adj.*] Of a device, using a continuous spectrum of values as opposed to a set of discrete values; as, an analog watch.

Where digital is discrete, separate (like the distinction between 0 and 1), analog is contextual. Our minds are fluid. They are more ‘analog’ than ‘digital.’ Computers are designed more to portray irrefutable conclusions than plausible conjectures. And without the “fuzzy math” of plausible conjectures, there is no genuine creativity.



Allegory and the Literalism Prison

Some people consider divination to be an occult practice. Occult practices hide truths in codes. In fact, *Webster’s* main entry for *occult* is “to shut off from view or exposure: cover, eclipse.” As we’ve seen, in tarot these codes are manifested through pictorial and numerical metaphor and analogy. One codified structure embedded in tarot is a subset of analogy called allegory. To read a complex tarot spread by stringing together metaphors is to create an allegory.

al·le·go·ry [*n.*] 1. the expression by means of symbolic fictional figures and actions of truths or generalizations about human existence; also : an instance (as in a story or painting) of such expression 2. a symbolic representation (*Webster’s Online*).

Like analogy, an allegory (linguistic *or* visual) is sustained longer and more fully in its details than a metaphor. Yet in general, allegory appeals to imagination where an analogy appeals more to reason.

A thorny research problem in cognitive linguistics involves the mystery of how people distinguish abstract modes of representation like metaphor, analogy, and allegory, from literal statements. Questions concerning

The Noam Corner

Noam Chomsky proposed a propaganda model grounded in the filtering of analogy and metaphor. The mass media has a tendency to screen and filter content in order to restrict the metaphors and analogies employed, deliberately controlling the ways in which audiences understand content. In Chomsky’s view, the basic human capacity to acquire language and believe metaphor is abused by the mass media’s restriction of the range and type of metaphors and analogies to which the citizen is exposed. Specifically, mappings that emphasize the security of property or the fear of conflict with authority would tend to be highlighted in a mass media controlled by private corporate interests, while mappings that tend toward emphasizing the risks inherent in conflict over resources, or mappings tending toward fairness, would be de-emphasized or censored altogether (*Wikipedia*).

how we know when to initiate metaphoric processing ♣ remain unanswered. Scientists used to believe that metaphor is initiated only after literal processing fails. But it isn't so; it's been found that, usually, literal and metaphorical interpretations are derived simultaneously.

In any case, misunderstandings arise when allegory is mistaken for literal reality, and this dilemma invades realms such as religion, where abstract psychological or spiritual concepts are communicated in a poetic manner. Wars are fought over this stuff.

It's nearly impossible to take the tarot at face value, but people do it anyway, and usually it scares the wits out of them. For example, the *Death* card, with its sickle and skeleton, requires us to make a choice: take it at face value or find the code. It's like deciding if Judeo-Christian hell is a metaphor, or a literal place where we broil for all eternity. The difference with tarot is that if you draw the *Death* card and take it literally, well, eventually you will figure out that you aren't dead. At that point, you might just dismiss the whole thing as quackery. That's fine. Just, please, don't let that have you throw me into hell.



♣ CONTEXT IS QUEEN 775

ON MAPS & OBJECTIVITY

All maps, even those that seem purely objective, “skew reality” in service to a particular kind of clarity. They must do this to be useful. In truth, maps are readable because of their exclusion of information. Which means they have an agenda. Which means they are also subjective.

There are things, for example, that this map doesn't show. It doesn't show the dirt path shortcut a few generations of kids wore

down. It asserts the location of the *Boy Scouts of Canada Museum* and *Carlton University*, but not the strip club on the corner, or the *Ottawa Public Library*. And this map says it's the same distance to the *Botanical Gardens* from the intersection of Alta Vista Drive and Pleasant Park as it is from the corner of Navaho Drive and Baseline Road, but we aren't shown the giant pothole on Navaho that causes accidents, or the gridlock on Baseline.

It looks to be the same distance, but according to real experience, it isn't. All maps make assumptions.

A tarot spread is also a kind of map, one that objectifies internal experiences in service to a particular kind of clarity, and to find expedient paths. Traditional narratives are also covert maps; they serve their own guiding functions through the empathic knowledge they generate. Tarot and other narrative

forms are, of course, simultaneously highly subjective; they're “affected by personal views, experience, or background peculiar to a particular individual (*Webster's*).” A creative novel is overtly subjective: the art form encourages ambiguities to stimulate imagination in service to its own mapping function.

In turn, all maps are, covertly, subjective narratives. Maps like this one tell stories too, quietly.

IN THE BEGINNING WAS THE PINK ELEPHANT

Just then, did you “see” a pink elephant? Probably, in your mind’s eye. This is a very simple example of “thinking in terms of images.”

Most of our cognitive processes remain a lovely mystery. The internal experience varies between individuals, further ephemeralizing attempts at pinning down some scientific description of precise process. Whether it is our actual thoughts and feelings or the “way” we think and feel, we’re compelled to know and be known. So, we communicate. The great challenges facing design professionals issue from these mysteries.

In his essay *Some Virtues of Design*¹, Gui Bonsiepe complains of “a deep linguistic bias against visuality and its cognitive potential,” a view he shares with a significant population of contemporary design theorists.

Yet masterful writers have always held a deep respect for the power of the image. Grounding abstract concepts with a parallelizing description of objects resulting in metaphor, simile, allegory, etcetera is widely valued as desirable.

Consider Bonsiepe’s resentment toward opening lines of a popular tome: “In the beginning was the Word.” This phrase is (I

think) a metaphor for the externalization of the creative principle; the creative principle made manifest through shared awareness.

Passages from the same literary work, probably parroted in equal measure, portray Jesus as “the light of the world.” Light has everything to do with visuality, as pure information that illuminates objects. The Bible also employs devices of parable and allegory to “illuminate” key concepts. Parable and allegory use the relationship of objects, through metaphor, to bring esoteric ideas closer to our human experience. It does this in part by sensualizing the spiritual dimension and the abstraction of words, by integrating it with the realm of physicality, and this enriches the communicative experience because it engages our many ways of knowing. Genuine meaning is created only through a leap beyond the literal, beyond the surface. In creative and even analytical writing, the surface reality of objects that we “see” in our mind’s eye act as a springboard to association, and it is the integration of associations that has everything to do with making meaning.

Wordsmiths (and poets in particular can be obsessive about this) recognize that our cognitive processes rely heavily on visuality. Evidence dreaming — a highly symbolic function of the mind that processes in great

measure through images as well as associations other words and objects have to the images. Good writers are aware that visuality is integral to elegant, creative, and effective communication. After all, it’s a rare maverick who would claim a word is worth a thousand pictures.

The difference between design and writing as art forms has to do with their inverse processes, and this implies that important aspects of their methodologies are shared and inseparable. When we read, images are evoked in our mind; the visuality is internal. Words are the external signs, and the visuality is internally created within the imagination. On the other hand, when we perceive design, the image, the visuality, has been externalized directly. Instead of creating visual images within the imagination, the engagement of our imagination (if we use it) employs the tension, juxtapositions and symbology of the explicit images to construct meaning, and “naming” what we see by internal dialogue is a natural occurrence for any attentive perceiver. We think, comprehend, and imagine in words *and* images.

The beauty and power of words is deserving of designers’ consideration and respect in this manner — and not only as compartmentalized within the niche of typographic concerns. Words and images aren’t enemies, they’re two hands on the same body. I use my right hand more than my left, but there’s no constructive place for my left hand to resent

my right. They work together. If words should not be considered more important than images, as Bonsiepe complains, it is certain that neither should image be considered more important than words: there should be no contest here. So why do so many design theorists seem intent to create competitive hierarchies of them? We benefit in remembering that in the comprehension of design, it’s natural that words are brought to mind. In addition, words that designers incorporate into their pieces deserve to be pondered over as much as any other aspect of the work. Often, haphazard consideration of words just kills good design.

Bonsiepe also complains that in western civilization imagery is too often unfairly considered “superficial and treacherous.” In my opinion, this treacherous superficiality occurs only in the literalization of the employ of image, and this happens when holistic concerns (as those above) are ignored. Just as in writing, superficiality can occur through the intent or the ignorance of the designer, or else it can be due to laziness or lack of intellectual capacity of the perceiver. Accusations of superficiality, that so rankle Bonsiepe, in fairness do occur, and perhaps the way to discourage any bias toward this — if it exists — is to consider how and when it occurs so as to reduce it.

“Superficiality” happens when much more value is given to form than to function. This, in turn, happens when potentials for worth-

¹ As of March 22, 2006 Bonsiepe’s essay can be accessed online at <http://www.guibonsiepe.com/pdffiles/virtues.pdf>

while, significant associative qualities are ignored (intentionally or not), and/or an attempt at a leap into meaning from the surfaces fails. Bonsiepe laments “the imperialism of the word,” but the imperialism of the image is on the rise, can be traced to this superficiality, and can easily occur when we denigrate the value of words.

I share Bonsiepe’s concern that visual literacy isn’t given its full due. And I contend that linguistic literacy is falling into decline, which undermines his hopes for a more visually literate society. For if we don’t value and consider the precision of words, the intellectual and imaginative functions that atrophy in consequence are the same functions needed to critically and imaginatively consider design in a meaningful way. The absence of these rigors reduces the perception and the creation of design to mere superficiality.

As a society, we are emerging as passive consumers of images. It’s an age when we are obsessed with a political candidate “looking the part,” when he has to oversimplify his words to the point of treacherous distortion in order to “communicate” with the public. That old truism “seeing is believing” is losing merit, because what is seen (as a result in part of new technologies) has ever more capacity to be illusory. Our encroaching illiteracy is a two-pronged beast, well served by the fact that capacities for critically deciphering texts and images go hand in hand.

Pitting word-based communication and visually-based communication against each other is a self-defeating enterprise that doesn’t help designers or society at large. I’d be so happy to see the design community, and design education, embrace the power of words as a holistic, integral aspect of design, as writers do in the reverse.

CONTEXT IS QUEEN



In 1996 Bill Gates proclaimed “content is king” (of the internet) and since then it has become a universal buzzword. Content is usually taken to mean material such as books, movies, sports events, or music. It is what is perceived. But I disagree. What rules the internet is more about context than content. It’s more about communicative relationships and *how* content is perceived than the content itself. E-mail, blogs, webcams, database searches — these kinds of technologies exemplify the aspects of communicative relationships that make the internet revolutionary and powerful. Context is Queen. The King can stick around.

Studying the nature of context in regard to visual content has been very important for me in order to clarify my understanding of how meaning-making functions in tarot. Toward this end I found it helpful to create a distinction among different *kinds* of context that are ubiquitous in perceiving design. This

also foregrounds the subjective nature of interpretation.

I find that there are three interdependent types of context that determine whether the meaning we attribute to design (as an object or action) will manifest more as poetic interpretation or as a literal, informational interpretation.

The first type of context is *immediate context*. These are the formal relationships within the work itself, and the object’s relationship to the surrounding physical environment. It also includes assumption of the basic, immediate needs of the perceiver, or the perceiver’s present disposition. Immediate context usually seems to be what is primarily formally critiqued in design.

The second type of context belongs to the viewer, whether collectively or as an individual: *subconscious context*. Subconscious context is the entire psychic database of information and associations (memories) that

hold a significant relationship to the object. It includes unconscious material (information and associations).

The third type of context is **cumulative context**. Cumulative context is formulated in the mind of the perceiver “on the fly” *according to the relationship* between the subconscious context and the immediate context. Cumulative context is formulated through a cognitive process that filters selected contents from the subconscious context according to their relevance to the immediate context. Layers of associations are filtered according to this relationship between immediate and unconscious context, and blended into a particular quality of awareness. The cumulative context can be “unpacked,” in varying degrees, presenting into consciousness as one particular “memory” or association over another. Yet it’s the *sum* of selected associative experiences, as determined by the immediate context, that describes cumulative context as an entity. In short, the cumulative context is what is brought into design work by the participant and may include past experience with the work itself, as well as all content previously experienced in a time-based work. It’s somewhat similar to Freud’s conception of “latent content ♦” in dreams. It isn’t the “meaning” of the piece in its entirety but the meaning is created from it.

The experience of interpretation necessitates an interplay between these three facets of context; most obviously the relationship

between immediate context and cumulative context.

A literal, as compared to a poetic, interpretive experience, emphasizes immediate context over cumulative context, and vice versa. For example, the lighting of a candle as a very literal experience/interpretation draws more upon immediate context (remember immediate context includes the object’s relationship to the surrounding physical environment): the need for light to see by. Only the “bare bones” of subconscious context is employed by cumulative context: the understanding (memory/association) of the utilitarian function of a candle.

In a more poetic experience, the immediate context obviously is still relevant. Yet it will be of a different nature. The immediate needs of the perceiver — unconscious¹ or not — are different. For example, the urgency of the need for light *may* be minimal or nonexistent, but in any case a desire for “atmosphere” is present, in which more energy is pulled from cumulative context than in the literal interpretation, because many more associations come in to play. Along with the information about the utilitarian function of a candle, many more layers of association are retrieved and blended here into their own unique sum.

If the immediate context is in preparation for a romantic encounter, for example, light-

ing a candle might retrieve (subconscious) associations of candles with past romantic encounters, with the nostalgia of some particular movie, with the words sizzle and flame and burning, with offerings in a catholic church. These layers of association are blended here into their own unique sum, the cumulative context, that informs the interpretive experience .

Important to remember is that while a layer or layers within this sum might differentiate into conscious awareness, the *sum itself* is

not experienced as linear, concrete “memories,” but rather as an informed mood.

mood 1: a conscious state of mind or predominant emotion: *feeling* 3 c : a distinctive atmosphere or context : *aura* (Merriam-Webster’s Online)

A facet in this definition to note is, *a receptive state of mind predisposing to action*. The “action” that cumulative context “predisposes” the mind to is poetics. Poetic insight occurs at that moment when the cumulative context interacts with immediate context.

immediate + subconscious = cumulative → **cumulative** + immediate = poetics
immediate + cumulative = literal (“informational”) interpretation

Emphasis on one type of context over another determines the quality of interpretation.

Plumb



plumb *adv.*

1. In a vertical or perpendicular line.
2. Directly; squarely: also *plum* (informal).
3. Utterly; completely: *plumb worn out*.

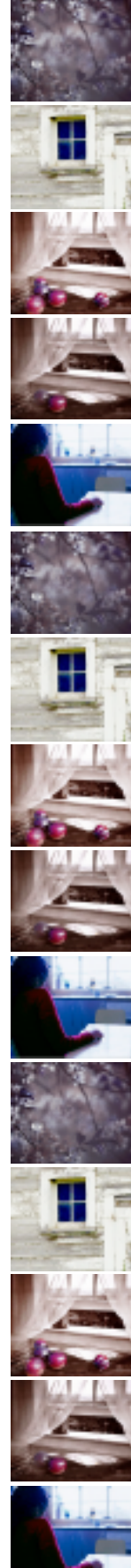
As a cinematic narrative experiment, *Plumb* explores the nature of time and context in its relationship with metaphor.

The four minute movie encapsulates three segments. Each segment features identical imagery, in identical sequence. The only visual variation among the segments is the tempo at which the images linger and fade. Each segment’s visual story is simple: we enter a house where six plums sit on a table. One by one, the plums fade, and disappear. In the last shot, a woman sits with her back to the camera.

The variation in the segments is based on dialog and sound. In this way different immediate contexts are attached to the identical visual content of each segment. Each segment can stand alone as it's own little story, but at the end of the sequence, the cumulative context of the imagery informs an interpretation of the linear story that is cyclical in nature.

Segment I attaches a joyful, sensual anticipation to the plums. The song *My Favorite Plum* by Suzanne Vega introduces things. "My favorite plum, it will be so sweet. I've been so dry, would make my heart complete. You'll say that I'm foolish to trust, but it will be mine and I know that it must, 'cause I've had the rest, and that is the one for me. I've seen the best, yes, and that is the one for me." In this context the plums disappear slowly, steadily, lingering and lingering on that final, favorite plum. Because of this context, the woman in the last shot appears to be in a dreamy mood.

Segment II begins with a jolt: the clanking of a freezer door opening and slamming shut. A man's voice casually recites William Carlos Williams' *This Is Just To Say*: "This is just to say that I have eaten the plums that were in the icebox, and which you were probably saving for breakfast. Forgive me. They were delicious. So sweet, and so cold." The plums vanish, this time at a too-rapid pace, as we hear slurpy munching sounds behind the dialog. The context has changed, so the same shot of the woman now looks pensive and disappointed.



My Favorite Plum by Suzanne Vega

This Is Just To Say by William Carlos Williams

Late Hours by Erica Lyn Gambino

Section III begins with the sound of paper crumpling and a trash can lid opening and closing. "This is just to say..." says the female voice, "I have just asked you to get out of my apartment. Even though you never thought I would. Forgive me. You were driving me insane." (The poem *Late Hours* 'with apologies to Williams' by Erica Lyn Gambino.) In this segment the plums disappear resolutely. There's no lingering. In this final scene, the shot of the woman is the one that lingers and fades out slowly. What is she thinking this time? The dialog suggests she's incensed. It was a plumb line from the joyful anticipation to disappointment. Yet as the shot fades, the cumulative context has a chance to present itself; which contrasts the context of this image with that of the other segments, especially the first. Again there's light coming in through the window, even though once again she is alone. The gentleness of the fade-out impels us toward a quality of hope that may still remain inside the sadness.

In section I the plum object may be interpreted more literally than metaphorically, because the words reference plums, and the visuals reference plums.

By section III, there is no possibility of the audio referencing the duplicated visuals in a literal manner. In the immediate context, only the visuals reference plums. But the cumulative context (because this is a time-based work) is now such that the poetics are obvious; the plums are much more than plums:

they now carry associations of a relationship in different contexts. And so the disappearing plums signify not only the disappearing relationship spoken of in dialog, but all of it: the initial hope in a beginning, the disappointment, and the end.

Ersatz



ersatz *adj.* <German> Being an imitation or a substitute, usually an inferior one; artificial.

As an exploration of the environment of the screen, this modular video project questions how mass media's creation of persona modifies viewer relationship to content.

In *Understanding Media* (1964), Marshall McLuhan points out that "the medium is the message" as well as "the massage." He proposes that media themselves, much, much more than the content they carry, shape human activity (McLuhan goes so far as to postulate that content has very little effect on society). In *The Medium is the Massage: An Inventory of*

Effects (1967), he declares: “All media work us over completely. They are so pervasive in their personal, political, economic, aesthetic, sociological, moral, ethic and social consequences that they leave no part of us untouched, unaffected, unaltered. The medium is the message. Any understanding of social and cultural exchange is impossible without a knowledge of the way media work as environments.”

Our associations with a medium, then, and the ways in which we are accustomed to being “massaged” by a medium, will necessarily impact our viewing experience. Through this Design Studio project I came to understand this concept experientially.

The Design Studio I assignment was to create a conceptual prototype of an “interface to a place” in a combination of various media in multiple channels.

Writers and directors will often describe the setting or location of their story as a “character.” I was interested in an inversion of this custom; to explore another person as a place. I was interested in the dynamics of the Other: the psychological “space” we inhabit when relating to another person, that shifts so according to personal context. I was interested in exploring the nature of psychological projection onto other people. How in *viewing* our environment, which includes other people, is dependent upon the intensity of our own projected “stuff.”

In concert with the restrictions of the assignment, my initial concept was to make an interactive video, whereby the user has a choice of colored ‘projections’ with which to merge onto a “neutral,” black-and-white video portrait of a female character. The underlying video would always remain the same, but the “projected” video channels, containing additional (color) visual elements as well as sound, would fuse with the “neutral” video upon selection to create a distinctive perception of the character according to mood. The Other would not change; only our perception of her.

I decided to film my classmate, Carolin Horn. We were in the early stages of a friendship, so I didn’t have a lot of cumulative context to drive a portrait into anything too slanted. Another reason I wanted to film her for this project was because of her special quality of innocence—an interesting foil for projection. And her looks are photogenic in a traditional sense: pleasing yet her beauty is not of the challenging variety. In my ad agency background, I’d often heard it said that the most photogenic faces are those that are regular, uncomplicated, and therefore almost a “blank canvas” upon which the viewer (or makeup artist!) will project his own content. I like to think I have a broader opinion on the matter of what constitutes photogenic, but in any case that was what was needed for my purposes here.

In the process of filming, however, even the most mundane of gestures (I only wanted to film her doing boring, everyday things) could not disguise the unique loveliness of Carolin’s character. So I also began work on one of the sound channels, merging a musical track with a track of Carolin speaking German and describing some English words that were new to her. I started with that as I was consistently delighted by the comically sweet way she would mess up the English language.

This was my very first time with a video camera, my first time working with sound, my first time editing video, and my first time using the software Director. Needless to say, I had never “screened” a work. So when I screened the template-in-progress along with the first sound channel during class, I was astonished by the effect “the big screen,” as a medium, has on content and viewer response. What in my experience of reviewing the content on a small computer screen had seemed a subtly intimate portrait with one (audio only, at this point) projection of benevolent affection, became something else up there. She went from person to persona.

The students in my class (with the exception of Carolin who already knew what was going on) didn’t seem to find in the ditty what I had intended. They were already expecting something to *happen*, and so seemed somewhat bored while concurrently heaping adulations upon Carolin for her photogenic

endowments. Indeed, she looked lovely while brushing her teeth and walking down her garbage-strewn street. But that really wasn’t the point.

If I’d set out to make an outright “arty” film, certain devices would have inevitably tipped the viewer off to enter an “alternative” perceptive space. But I didn’t do that; I hadn’t wanted to, because I didn’t feel that would have rendered the underlying video ‘template’ as neutral I’d previously explained to my class I was hoping to achieve. Nevertheless, I don’t believe I succeeded yet in making a purely neutral template of a woman — a difficult (impossible?) task — my affection for Carolin affected our interaction, and therefore her behavior while filming...as well as, perhaps, the footage I chose. And maybe it was a mistake to screen the first audio projection channel with the template-in-progress, which was infused with emotion. Yet despite my verbal invitations, none of these considerations were discussed. How come?

I was surprised by my class’ response, but also by my own change in perception when I saw the previously book-sized imagery on what to me, was a huge screen. It was a completely different experience! Carolin was now larger than life. She took on an *iconic* quality. That was not what I had intended. The different media environments seemed to inverse the effect of the portrait, which went from intimate to iconic. It was unsettling.

I'd anticipated the interface of the final project to be, ultimately, the personal computer. And that was the interface I was using to create it. But for the purposes of each class critique, and also for mid-semester and final reviews, the viewer interface was the big screen. This was new to me, and I had to take it into account.

Now, in metaphorically mirroring the "objectification" of a person through our inevitable psychological projections, I had more to work with than I'd bargained for.

In a reflexive spirit I added fragments of Carolin speaking about how she felt being filmed. "I don't like me in pictures," she said. "I always look strange

in pictures I think....if I'm *good* enough or something like that. It is strange when you know there is a person who always look at you...you will see later then how you looked like when you do stupid things: 'Oh my God, what have I done?' I am happy I'm not in a *Big Brother* show." Roland Barthes writes in *Camera Lucida*, "the photograph is the advent of myself as Other: a cunning disassociation of consciousness from identity." I also have never really enjoyed being photographed. I feel rather like an impaled bird; some essence conveyed through gestures, through movement and the transition between movements,

is eerily discarded in a dissection of time. This was one reason I was intrigued with video. If such was my discomfort, this kinetic medium promised transcendence of those limitations.

Yet the moving pictures did not prevent, at least on a big screen, a disassociation of persona from person. Without the context of a plot in the portrait-sketch, the enormity of image seemed to overwhelm the subtler aspects of the guileless innocence in her expressions, her movements. In short, her true character. She was now persona. I felt strangely guilty, as though I had stolen something from her, as though I had set about to market her, like I was reducing her real person by glamorizing, through scale, her image. *Psychology Today's* article "Model Existence" confirms that, "We confuse the models themselves with their images — a confusion that renders these very real women, and their real needs, invisible. The model is not a person. She's not valued in and of herself. There's never any consideration of who she is. Models are not encouraged to be real people. The industry treats them as if they are only an image."

This experience changed the direction of the project. Being that this was my first semester, I was a bit too insecure to follow through on my original vision despite the feeling that it wasn't yet understood. But in addition to that, I was now interested in how viewer response (and non-response) to the images on-screen seemed inextricably tied to commercial associations. I began approaching

the project differently. It became concerned with the projection of the screen itself; how the medium and its associations might impact the perspective of the viewer. Instead of exploring the dynamics of projection onto another human being, the project became about the contextual relationship of the screen, our associations with it, and how this alters content. So now, instead of the overlaid projections merging with the template according to an emotional state, I finished the template and incorporated it into various "screening environments."

Using After Effects, I shrunk the template movie and placed it inside a new environment: a drive-in theatre. In this module, a man and woman sit in their car with their backs to us, watching the show. We hear the faint bustle of the surroundings: far away car horns, doors closing. Munching popcorn.

Her voice: "That popcorn was expensive."

His voice: "Yup."

Cartoon thought bubbles appear briefly over their heads. Hers: I like her T-shirt. His: "She's pretty hot."

Him: "What *is* this?"

"I think it's a preview."

"For *what*?"

(pause)

Her: "Maybe it's an ad, like that Nicole Kidman thing?"

Him: "Yeah well, there's *trash* everywhere. (pause) It's probly s'posed to be some... art thing."

(pause)

Her: "No... art movies have crawling ants and big huge small things and... this doesn't look like an art film."

(pause)

Him: "Whatever."

Her thought bubble: *Whatever*.

His thought bubble: She's definitely hot.

"Are you still hungry?"

Her voice: "Uh uh. (pause) That's so fake."

Thought bubble: "I should wear my hair like that."

In module 2, the template plays on a flat-screen computer on a sales counter, within video footage I shot secretly at DKNY. The only sound is the cash register and the clerk chatting with me about skirts.

Module 3 is an art loft scene. The template videos play inside a row of televisions on the floor. Two of the videos within the row of monitors have posterization and sepia effects applied to them, and on one static keeps breaking in. Here the audio is loud rock: I spliced Marilyn Manson's *Rock Is Dead*: God is in the TV / Rock is deader than dead deader than dead / So fuck all your protests, and put 'em to bed / God is in the tv / Anything to belong.

Module 4 has the video in a television watched by a little boy. He sits (again with his back to us) alone, immobile, staring. I screwed a lot with this one; I broke my own rule and spliced the video template to mimic the *Friends* title sequence. (This title says



Photo of me filming Carolin by Florian Jennett.

template



mod. 1



mod. 2



mod. 3



mod. 4



Friend). The video is in color this time. The audio is the *Friends*' theme song: "I'll be there for you..."

I beleive the whole effect questions how mass media's creation of persona modifies

viewer relationship to content. For me it was a crash course in kinetic media and an investigation into the effect of context on content, which became a major focus of study in the investigation of tarot.

AUTHOR-ITY AND SPIN



Cartomancy is high on the interactivity scale: the authoring scale. If you practice cartomancy with a professional or a friend, that context will inform the meaning of the cards. In a reading with another person, the narrative is negotiated; mediated between the reader and the readee. This has benefits: it's fun, social intimacy transpires, and there is another person's perspective to consider and learn from.

Yet the balance of author-ity in a mediated reading tends to weigh heavily on the side of the consultant. She becomes an authority figure. She may be highly intuitive, but the cumulative context that presents through the cards will, in varying degrees, contain "her stuff" too. This might be just fine and even beneficial. Yet when people open themselves to consultation, whether it comes from a university professor, a highly paid business consultant, or even a friend, the potential always exists that the consultee's best interests may be eclipsed in favor of service to a particular agenda on the part of the consultant. Unfor-

tunately the tarot is no exception to this reality.

I've only had two professional readings, and both were this year. I got to rationalize the indulgence as research. The first was a telephone reading (because she lives in Texas) with an author I admire, Cynthia Giles. I've read her books on tarot so I know she knows her stuff and that we are simpatico. She told me that



when she performs a telephone reading, in order to assure herself that the cards she draws for her client are meant for the client, and not for herself, she gives herself a reading shortly before the client session. If similar themes come up in a clients' spread, she'll suspect that she is projecting too much. In that case, she'll chat with the client for awhile in an attempt to sync up, and then reshuffle. If that doesn't work, she'll have to reschedule.

The reading with Cynthia was unusual in that I couldn't see the cards, but fortunately I knew enough about tarot to be able to visualize them. Nevertheless, the reading was ex-



The Celtic Cross spread that Cynthia Giles drew and interpreted for me. Because she was in a different state at the time of the reading she used a different deck; I reconstructed the spread post-reading. These cards are from the Handyl Tarot.

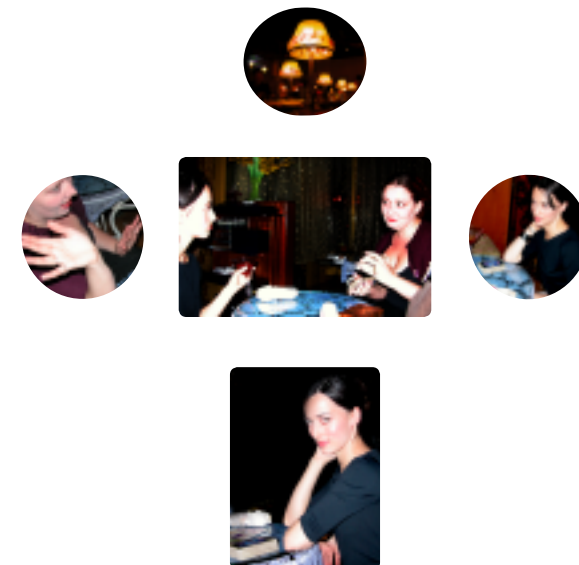
tremely enjoyable, interesting, and informative. I developed trust in her interpretations.

The second reading was a sham. I and my friend Nicole (a contributor to, and model in, *Samsara*) were at a trendy Cambridge restaurant, and we put our names on a list to have a reading with “Harmony.” Harmony is there every Tuesday night.

I documented Nicole’s reading as well as my own. Harmony, in my opinion, was an actress. And she’d assigned her own personal meanings to the cards ages ago, specific meanings like “the princess of coins is my travel-in-the-mountains card. Soon you will travel in the mountains. Maybe Vancouver?” During the reading, she only glanced at the cards, but she claimed to be psychic and to

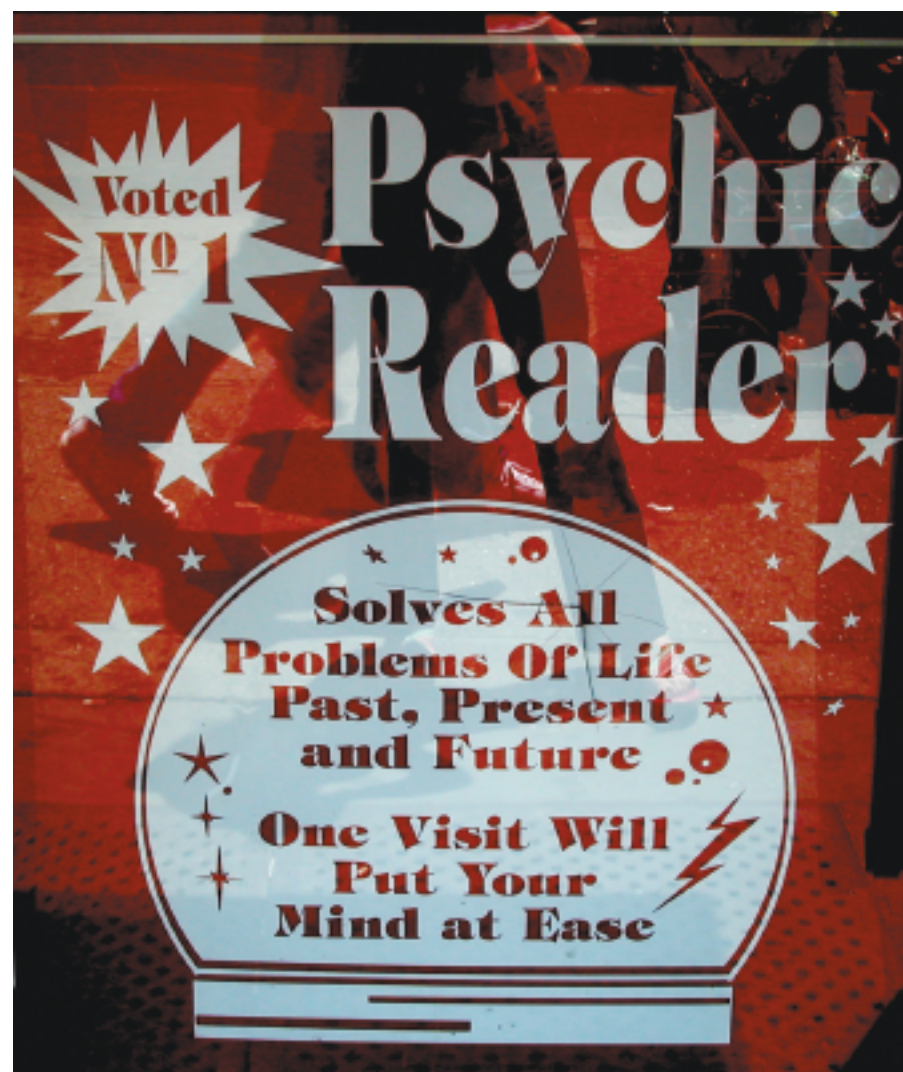
know the names and general appearance of men we were about to meet. It was pretty dumb. But I guess you have to hand it to her for raking in the cash.

In my opinion, to *depend* upon another person’s interpretations is an example of letting someone else decide your life. That’s one reason why I hesitate to read for others. Unless I know a person well enough to feel assured that s/he won’t be relinquishing her own responsibility in her choice-making, I decline. Any substantial readings I’ve given to others were for close friends, because one of the strengths of tarot as a technology is precisely its ability to encourage personal responsibility for making difficult choices, and sorting things out through personal reflection.



Harmony (left and center right) reads Nicole (center left, left and bottom) at Cuchi Cuchi in Cambridge. It was...entertaining. At one point, Harmony told Nicole, “I totally think you’re hot.”





YOU TOO CAN BE PSYCHIC!

psy·chic *adj*

1: of or relating to the psyche: PSYCHOGENIC

2: lying outside the sphere of physical science or knowledge : immaterial, moral, or spiritual in origin or force **3:** sensitive to nonphysical or supernatural forces and influences : marked by extraordinary or mysterious sensitivity, perception, or understanding



THE PATH OF LEAST RESISTANCE

What's fate got to do with it?" I've been asked this question in various forms a lot over the past several months. A thesis advisor diligently advised me that addressing such matters would open up a big and stinky can of worms. Nevertheless. Divination wouldn't be fun without such curiosities and at least some opinion on the matter. So the following is mine.

First of all, I don't know. And I like it, that I don't know. But having said that, certain things make sense to me. The logic begins with a foundational premise: if intentions are focused as such, the randomly chosen cards are synchronistic ♦ in nature. Thereafter the conscious mind gets the heck out of the way and lets that information be revealed.

Still with me? Presume a layout includes a future position. You've drawn a card in response to a particular query about pursuing a certain choice, and now you see what overarching archetype such a choice will create for you in the near future: the (always temporary) outcome of your 'mission should you choose to accept it.' This is the outcome that

will occur if you make that choice. Because, of course, we have free will. Cartomancy after all is a decision-making aid. What would be the point of inquiring about this outcome



or that if we have no say in the matter? The system wouldn't work. You'd need lots of blank cards that mean "Nothing Remotely Close Could Possibly Happen."

This outcome that your unconscious or whatever is at work here has presented to you describes what shall transpire (if such a choice is adhered to) according to the path of least resistance.

There are universal patterns at work that we are wired to be too thick to see. Yet our (and others') past happenings, states of mind, and actions set certain probabilities in motion. Cause and effect, as it were...yet a much, much subtler version ♣ than the basic deterministic line of reasoning would lead one to believe. We are wired this way because we wouldn't be able to function properly if we were consciously privy to the intricacies of such patterns. Information overload would be the death of me, I'd posit.

So the 'outcome' or 'future' card shows us what will transpire if we go about our merry way having made that choice: *without conscious exertion toward toward changing* said outcome. Such *effort* describes the "resistance" aspect of the path of least resistance.

It gets more interesting. Because each time you reads the cards, your psychic orientation, and thereby present and future reality, shifts, if but a tiny bit. You never step in the same river twice. When information is received, parameters shift accordingly. And yet archetypes by their nature are very strong constellations of energy. The major arcana cards indicate stronger psychic constellations than the minor cards. So, for example, if I drew a major arcana card, more effort would be required on my part to circumvent the natural flow of things. But (I believe) it can be done.

Additionally, it should be mentioned that the generated awareness of a certain outcome cannot be disassociated from the possibility of a self-fulfilling prophecy. Cartomancy helps clarify unconscious as well as conscious

intentions, and such resultant clarity and focus naturally leads to changes in behavior — for better or for worse. Admittedly, this is one reason why cartomancy can be a "dangerous" endeavor. Anxiety or fear generated from a tarot reading that seems negative to the participant runs the risk of embedding or fortifying destructive patterns rather than working them loose. Accordingly, an understanding of the concept of free will, which underlies the principle of the path of least resistance, is to my mind an essential premise for any reading that presumes to be anything other than entertainment.

Cartomancy grants us a peephole into our fate. Yet tarot, with its philosophical orientation toward growth and development, insists upon individual responsibility toward determining that fate. While we are constrained in varying degrees by natural laws evidenced in the falling of the cards, it's how we channel the forces at work that mark human existence as a creative endeavor at play.

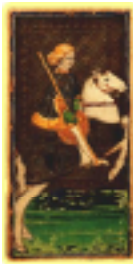
A BIT ABOUT LUCK



Once, a farmer's work horse ran away. His neighbors were quite sympathetic saying, "How awful for you." He replied, "We'll see."

His son went to find the horse and came back triumphantly leading the somewhat agitated steed. The neighbors joyfully exclaimed, "What joy; your horse has been found!" The farmer calmly said, "We'll see."

The farmer's son took it upon himself to break and train the temperamental horse. A few days passed. One morning, the son was thrown from the horse and broke his leg. It required setting and binding and he could not work on his father's farm in his condition. The neighbors sadly pronounced, "How unfortunate for you: you will not have your son's help around the farm for several weeks. What a catastrophe!" The farmer replied, "We'll see."



But one neighbor retorted, "How can you be so flippant about your son's predicament? I know for a fact that you will have to work late into the night to get all the chores done without his help. You may be in denial, but you *do* have a serious problem!" The farmer quietly said, "We'll see."

The following day, the emperor's guard arrived. They came because the Emperor decided it was time for military conscription. All eligible men would be drafted to go fight in the Emperor's latest border war.

Because of his broken leg, the farmer's son was not carried off by the army. Because the horse was too unsettled, it was not conscripted. And because he had no horse or son to help him feed the rest of his family, the farmer too was left to tend to his farm.

—A Taoist Parable



Clockwise from top: The Wheel of Fortune, Death, Knight of Swords, The Hanged Man, and The Hermit, from the Visconti deck, 1350.

CONCLUSION

There came a point in my studies when I began questioning the distinction between art and design, and none of the answers provided to me felt right. A common consensus was that design is intended to communicate, and art is just for the artist's personal expression. Since I disagreed so strongly with this, I was inclined to investigate the matter experientially for myself. As you might expect, I haven't reached a neat conclusion on that score.

But even in work that is situated subjectively, requiring more imaginative participation, there is a communicative objective. If there weren't, artists would not "express themselves" in such a public manner. As soon as another person internalizes design *or* art, it communicates. Perhaps often, the intended meaning in art is more fluid and open than in design. But then, too, there are very literal works of art, and amorphous works of design that are more ambiguously evocative than definitive.

In any case, what has come to interest me is design/art works that are infused with a certain amount of ambiguity, enough to compel the reader to participate imaginatively to derive personalized meaning. Yet, too, work that is not so ambiguous as to be pointless! This quality of interest does not neces-

sarily make such work easy on us as viewers (or as designers, for that matter) and such work would rarely belong on the end of the media spectrum that demands extreme precision in order to target a very narrow objective.

In designing *Samsara's* visuals, I had the opportunity to slip around on that perceptual spectrum between 'objective' and 'subjective' imagery, investigating the authorial function of the participant. I had to discover how directive/objective to make the cards; how ambiguous or abstract. One surprise was that the imagery became as figurative as it did. Because of the nature of the divination process, I found that exceedingly abstract imagery wouldn't be appropriate, at least in my current context. When a querant attempts to divine information from the unconscious, it can be considered a tricky business. Because I'd had past experience with tarot, the system to me seemed simple in its complexity, but almost no one I came into contact with in my studies had any familiarity with it, and most told me they found the system to be very complicated. I decided that, for my purposes here, very abstract imagery would most likely only confuse and delay matters. Because I didn't want to put words on the cards, the imagery chosen needed in some way to

be familiar enough to readily provoke metaphorical connections with the querant's personal experiences. I'd like to mention here that I've no doubt this *can* be achieved with abstract imagery, and feel it would be a very interesting project to take on! It's just that for now, because many people don't experience abstract art as accessible, it would have been another hurdle in a timed race.

Luckily for me, simple figurative photographs become more potent in the context of divination. Since the user is aware of the intent of the system, though not necessarily the designer's intent with the image (meaning she knows her task is to relate the cards to her situation-in-question) there is less of a chance that the image will have "nothing to say" to her. This is not to say, however, that I could have slapped any old picture into the system. Far from that. I made and discarded (pardon the pun) thirty six cards that didn't work; either they were too generic to steer into an interesting, precise quality (even if that quality is not of my intention), or the images were unfamiliar enough to confuse folks, which can stymie the psychic openness that communication with the unconscious requires.

Another challenging aspect of the *Samsara* project was discerning which balance of archetypes/qualities to include in the system. In the near future I plan on expanding it to include two more cards in each minor arcana number set, not four cards but six, which will

grow the entire set from sixty-two to eighty-two. This is because I feel six cards per number more fully represents the range of qualities inherent in each number. This is important, as there must be an premise of "completeness" in the system. Any divination system must rely upon a premise of completeness, so it might correlate with the situations of life in all strata, personal and collective, while foregrounding reciprocal relations and systems of dependencies within it.

And a completeness of system must, of course, also be present in any interactive narrative, although such completeness, fortunately, doesn't have to be as all-inclusive as a tarot deck, with its claim of allowing for the entire range of human experience!

Previously we saw that in narrative, every included element must be considered crucial to the structure of the story. Good video games, as a familiar precursor to computerized interactive narrative, have this down. The way the user experiences this concept in video games is that one wrong move and she's dead or otherwise loses. But video games are interactive narrative only in the most generous sense, as their plot lines are generally thin and clichéd and there is little to no real character development. There is metaphor, but little by way of poetics. Even so, the addictive nature of video games is due, in part, to one of the functions of narrative: to steer one successfully through archetypal psychic complexities. Video games play out the barest

bones of a hero's journey, with a confrontation between "good and evil." Succeeding in a video game feeds the very real need for mastery and control of situations, and it's therefore no accident they're most popular among teenagers. But while video games help fortify the ego, they don't foster real psychic integration as true narratives do, because they are too simple to foster empathic thinking.

Narrative has always been an art form that fosters psychic integration through generating personal, empathic meaning. And at the same time that our world is challenging our integrative capacities by becoming more and more complex, computational media allows for the emergence of new forms of narrative that mirror this complexity. As we've seen, one of the most prominent complexities of multifarious societies is contending with choices, choices, and more choices! (New technologies like the internet mirror this paradigm in an empowering manner: every hyperlink is a choice to make.) Traditional video games provide the illusion of navigating through archetypal realms by making choices, although the major skill developed (aside from computer literacy) is an increase in manual dexterity. These games don't generally teach us much about ourselves, and in the end, it's the acquisition of self-knowledge which develops the real ability to master the

decision-making skills teenagers, and all of us, must contend with in our era.

Empathically identifying with dramatic characters is one way to broaden and deepen our perspectives while learning about ourselves in the process. Computerized interactive narrative can, should, and will achieve this. But we have to reach further than simply using the first-person voice on-screen, throwing together a choose-this-or-that-pre-determined-ending *Choose Your Own Adventure* system. We've let video games be our model for interactive narrative long enough. We can consider other interactive narrative systems like the visual world of tarot, where our stories change every time we read it, and reaching further means reaching inward.

We want stories we can empathically relate to and learn from that allow us a significant level of psychic participation. We also want stories that allow for the physical participation that issues from this authorial participation. Design leads the realization of these goals, but as tarot demonstrates, other disciplines like art, psychology and literature play supporting roles.

Through interactive objects like *Samsara*, we can experience how and why visual meaning is created for ourselves. I hope that this document has been a valuable journey of interest through concepts of open imagery, as creating objects eliciting user participation lies at the very heart of all design.

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INDEX

A	dreaming 112
	duality 50 51
After Effects 123	
algorithm 14 18 30	E
Alice in Wonderland 78	
allegory 16 47 48 109 110 112	earth 27 107
analog 107 108 109	Egypt 34 36
archetypes 30 43 49 102 103	Einstein 98
104 105 131	Eno, Brian 39
artificial intelligence 106	
artists 36 47 79 103	F
authority 108 125	
	feedback loop 16 37 104
B	fire 27
	France 34
Buridan donkey 9	Freire, Pablo 37
	Frutiger, Adrian 47 100
C	
	G
cause and effect 46	
China 34 36	geometry 29
Chomsky, Noam 108	Giles, Cynthia 125 126
Churchill, Winston 7	Goleman, Daniel 10 38
cognitive linguistics 109	Greece 48
connections 16 17 30 38 41 42	
99 106 134	H
creativity 10 22 25 39 41 94	
103 109 137	Jessica Helfland 73 76
D	hierarchy 39 49
	The Housewives Tarot 48
database 8 14 16 79 115	hyperlink 42
dependency 9	

I
interactive narrative 7 8 14 15
16 17 42
interconnections 16 42 95
interdependent 43 98 115
interplay 30 76 104 108 116
Italy 34 36
K
Kabbalah 36
Kay, Alan 15
Korea 34
L
Locke, John A. 10
logos 100 101
M
magic 19
Moses ben Maimon 29
Manovich, Lev 72
mapping 8 30 42 106 107 110
111
McLuhan, Marshall 42 119 136
Middle Ages 34
module 16 39 123
multiple points of view 9 21 42
76
Murray, Janet 42

mystery 10 23 34 109 112
mythology 16 36 44 48
N
numerology 14 29
P
parallels 13 107
pattern 10 12 13 17 18 30 33
38 39 43 47 51 99
102 103 106 108
patterns 10 13 16 29 30 37 38
39 73 108 130 131
Peirce, C.S. 43 99 100
playing card 27 34 36
plot 8 17 43 122
Plotinus 13
poetics 7 117 119
poetry 94 100
postmodernism 41

Q
quantum physics 18 96 97 98
R
random 13 14 17 18 96 100
Renaissance 34 48
responsibility 9 22 25 37 90
127 131
reversals 51
ritual 8 14 19 26 44 48
Rorschach blots 9
Rumi 13
S
Dr. Seuss 74 77
Smith, Pamela Coleman 36
software 18 121
subjectivity 12 13
suits 27 36
supernatural 8 12 129

T
Taleb, Nassim 9
tarocco 34 36
tarotphobes 9
tea leaves 9
transcendent function 43
V
video 84 107 119 120 121 122
123 124 134 135
Visconti 35 103 132
vision 12 25 26
visual literacy 114
von Neumann, John 18
W
Waite, Arthur 36
White, Pae 39
Williams, William Carlos 118

