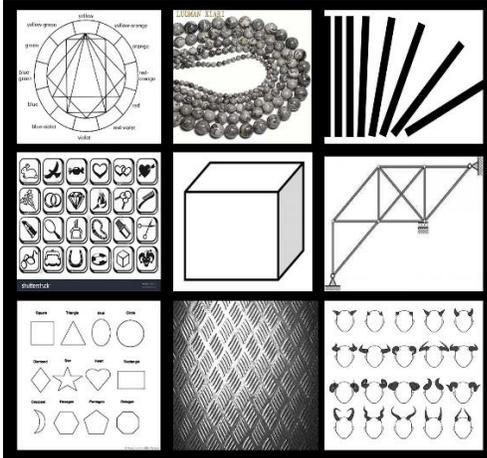**JEWELRY DESIGN COMPOSITION:**
PLAYING WITH BUILDING BLOCKS CALLED DESIGN ELEMENTS
by Warren Feld, Designer

Abstract:

Jewelry making is a constructive process of expression.   The language of expression begins with the idea of Design Elements.   Design Elements are the smallest, meaningful units of design. Design Elements function in a similar way as vowels and consonants in a language.   They have form. They have meaning. They have expression.   Some can stand alone, and others are dependent and must be clustered together. Better jewelry designers are aware of and can decode these expressive aspects of design elements and how they are included within any piece. This is one part of learning a disciplinary literacy in design. This literacy begins with a process of decoding and builds to an intuitive fluency in design.   This article focuses on this process of decoding.

Jewelry making is a constructive process of expression.

The language of expression begins with the idea of *Design Elements*.   Design Elements are like building blocks and function a bit like the vowel and consonant letters of the alphabet.   They have form. They have meaning.   They can be assembled into different arrangements which extend their meaning and usefulness in expression.

There is an underlying logic to this process – a vocabulary and grammar, so to speak.   Recognizing how this vocabulary and grammar is structured and applied enables the jewelry designer to learn how to be *fluent in design*.   Such recognition is critical in developing a coherent, consistent disciplinary literacy in jewelry design.   Such disciplinary literacy is at the heart of a professional identity for jewelry design artisans.

This literacy structure in design has four main components to it:
1) Vocabulary: Design Elements As The Basis Of Composition
2) Grammar: Principles of Construction
3) Strategy: Project Management[1]
4) Context/Culture: Shared Understandings[2]

This article focuses on the first component – *Design Elements*.

It makes sense for the designer to begin with something like building blocks, which I call *Design Elements*.   Design Elements, like building blocks, are tangible things.   They can be visualized.   They can be touched and moved around.   They can be combined in different arrangements.   They can be used to create many types of expressions. Design Elements include things like color, shape, movement, dimensionality, materials, use of space, and the like.   Design Elements are the smallest, meaningful units of design.

Not every Design Element is alike.   *Color* is different than *Shape* is different than *Texture*.   *Movement* is different than *Balance* is different than *Dimensionality*. Learning about and understanding the differentiation among Design Elements becomes very important if the jewelry designer is to have sufficient power and insight over consistency, variation, coherence and unity in their designs.   This power and insight is called *decoding.* Every jewelry designer needs to learn how to decode, if they are to be successful in design.

Some Design Elements are *syllabic* meaning they are independent and can stand alone.   Others are non-syllabic, meaning they are dependent and cannot stand alone.

INDEPENDENT DESIGN ELEMENTS	DEPENDENT DESIGN ELEMENTS
Function like vowels in alphabet	*Function like consonants in alphabet*
Many expressive variations	*Limited expressive variations if used alone and not in combination*
Syllabic	*Non-syllabic*
Can stand alone and be expressive	*Do not often stand alone and more usually require an assist from an independent design element to extend their expression*
Expressions sensitive to placement or context	*Expressions consistent, somewhat insensitive to placement or context*

Design Elements have *graphic representations*.   Graphic representations allow these elements to be recognized symbolically as a sort of short-hand.

Each Design Element also encompasses a range of acceptable meanings, which I call *expressive variations.*   These expressive variations, while different among themselves, are still reflective of that Design Element.   They have universal qualities in that people tend to *share understandings* about what these expressive variations mean and how they are to be used.   *Color Schemes*, for example, are objective, agreed-upon combinations of colors seen as coherent and unifying. Thus, any color scheme is an expressive variation on the element of Color.

The universal, expressive variations associated with each Design Element are, in effect, *attributes* of that Design Element*.*   These attributes have an objective quality to them in that there is general agreement among designer, viewer, wearer, buyer and seller as to what they express and how they might be used.

There is an expectation that whatever role a person plays relative to the piece of jewelry, the Design Elements and their attributes will be decoded in a similar way.

At this stage in the jewelry design process, the focus is on a simple vocabulary. The vocabulary is made up of Design Elements and their expressive attributes. The vocabulary encapsulates a generally *shared understanding* of its meaning and how it is to be used. It is at the point of grammar, thus manipulation and construction, that individual artists get to show their artistic hand in selecting and placing these elements into a finished piece of jewelry.

These Design Elements and their attributes can be arranged in different configurations I call *clusters*. Clusters may consist of independent Design Elements alone, dependent Design Elements alone, or a mix of both. For example, we may use an arrangement of glossy and matte *Color* beads to project *Dimensionality*. We may use different *Colors* of beads, rhythmically arranged, to project *Movement*.

Combinations of Design Elements into clusters can have different effects, from *synergy*, *antagonism*, *blending*, *bounding*, *freeing* and *inflection*.

Selecting Design Elements and clustering them does not occur in a vacuum. The designer selects and arranges Design Elements in anticipation of how these choices will be understood by others in a *universal* or *objective* sense.

This is a process which I call "*Backwards Designing*".[3] The building blocks and their attributes are first selected in anticipation of these shared understandings. For instance, the designer might choose colors by anticipating how others will recognize the legitimacy and appeal of certain clusters of colors – color schemes.

If the viewer, wearer, buyer or seller of a piece of jewelry cannot understand and relate to its Design Elements and how they are clustered within the piece, they will not understand it. They will not appreciate it. They will not see it as a legitimate piece of artistic expression. It will not feel authentic. To others, if the piece lacks evidence of shared understandings, this will result in that jewelry (and by implication, the jewelry artisan) getting labeled, for example, as unsatisfying or boring or ugly or monotonous.

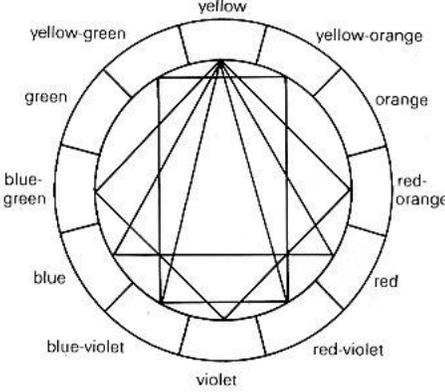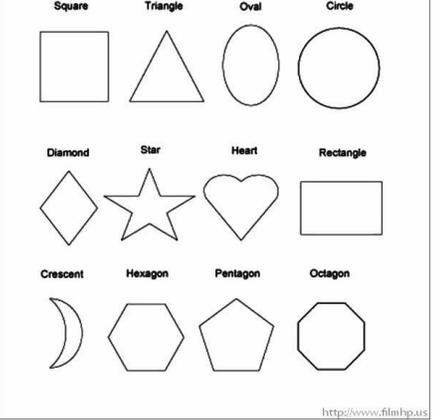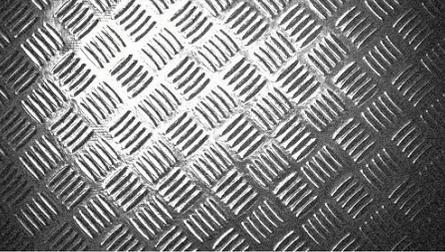**DESIGN ELEMENTS COMPRISE A VOCABULARY OF BASIC ARTISTIC EXPRESSION**

Working with Design Elements is not much different than working with an alphabet.

An alphabet is made up of different letters.   Each letter has different attributes – how it is written, how it sounds, how it is used.   Configurations of letters result in more sounds and more meanings and more ways to be used.   Think of choosing a "t" and an "h", and combining them into "th" like in the word "they".   We don't have a completely formed word yet, but we have the beginnings of a more meaningful unit than either letter standing alone.
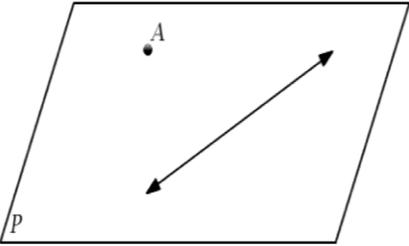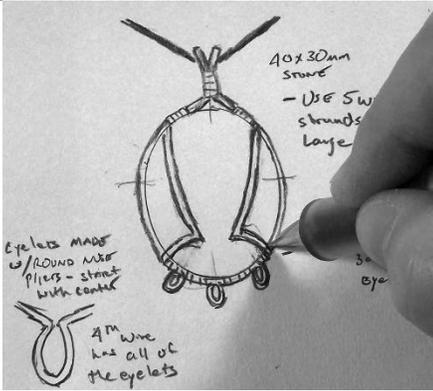
A person working with an alphabet has to be able to decode the letters, sounds and meanings, as letters are used individually as well as in combination.   As the speaker becomes better at decoding, she or he begins to build in understanding of implications for how any letter is used, again, individually or in combination. For instance, they might begin to recognize that when they combine "t" and "h" to get "th", they can also add an "e", but perhaps not a "z".
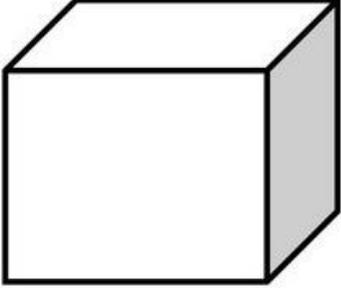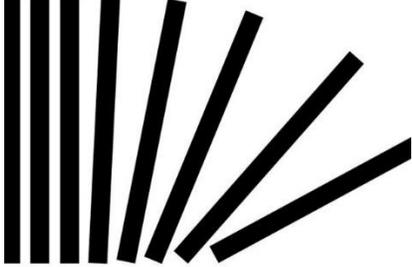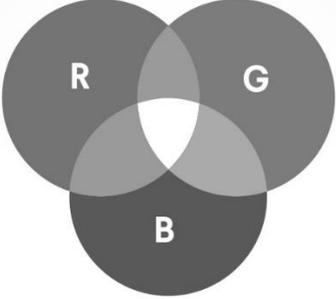
This is exactly what the jewelry designer does with Design Elements. The designer has to decode, that is, make sense of a series of elements and their attributes in light of our shared understandings about which Design Elements are appropriate, and how they should be legitimately expressed.

Let's examine a set of jewelry Design Elements in more detail and elaboration.
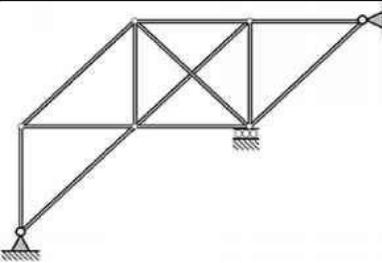
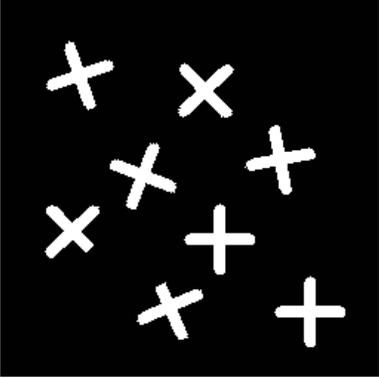| DESIGN ELEMENT Independent	GRAPHIC REPRESENTATION	EXPRESSIVE VARIATIONS	EXPRESSIVE VARIATIONS	EXPRESSIVE VARIATIONS
Color		Schemes Hue and Saturation	Simultaneity Effects	Values and Intensity Temperature Receding or Projecting
Shape		Recognizable Focused Distinct Blended Abstract Filled or Empty	Delimited, fixed, geometric Infinite, extending Distorted or overlapped	Masculine or feminine Organic or mechanical Background, foreground, middle ground
Texture and Pattern		Regular, Predictable, Statistical Repeated or singular	Random, Non-Statistical Feel or look	Layered or Non-layered Smooth or Rough

Point, Line, Plane		2-Dimensional 3-Dimensional Conform or violate	Connected or Unconnected Span and distance Actual or implied Thickness	Silhouette Focused or unfocused Bounded or unbounded geometric or curved
Material		Natural or Man-Made Soft or solid Heavy or light	Single or mixed media	Light refraction, reflection, absorption
Technique and Technology		Bead Weaving, Bead Stringing, Wire Working, Fiber, Clay, etc.	With or without application of heat and/or pressure	Fabricated or Machine Made Pattern or freeform

DESIGN ELEMENT Dependent	GRAPHIC REPRESENTATION	EXPRESSIVE VARIATIONS	EXPRESSIVE VARIATIONS	EXPRESSIVE VARIATIONS
Dimensionality		2-dimensional *(volume and mass; weight; density)*	3-dimensional *(relief, low relief, high relief)* Interior and Exterior Contours	Frontal or in-the-round Open or closed forms Static or dynamic forms
Movement		Passive *(ex: use of color guides the eye)* Direction Linear or wave	Physical *(ex: pieces, like fringe or spinners, actually move)* Stable or erratic	Mechanical *(ex: structure of piece allows piece to drape and flow)*
Color Blending		Simultaneity effects	Value and intensity Saturation and vibrance	Distinct or blurred Dominant or recessive

Theme, Symbols		Surface or interpreted meaning(s) or inflected Power, position, protection, identification	Clear or abstract referents Object as whole, or parts of object	Repetition or not Individual, group, cultural, societal, universal
Beauty and Appeal		Sensually pleasing: visual, touch, auditory, taste, smell	Objective or emotional	Coherence, harmony and unity Fashion, style, timeliness, timelessness
Structure and Support		Stiff or flexible Flow and drape Linkage, connectivity	Wearability Display Organization	Articulation Autonomy vs. Temporariness Interactive with wearer, or not
Craftsmanship		Inspiration Skill and dexterity With tools, or not	Design acumen	Personality and preferences

Form, Segmentation, Components		Shape with Volume Whole or divided Organized or chaotic	Perspective 2-dimensional or 3-dimensional Alignment	Shading Positioning or spacing Simple or Complex
Balance and Distribution		Symmetrical *(By size, color, or shape)* Visual weight Visual size	Asymmetrical *(By size, color, or shape)* Radial *(By size, color or shape)* Visual placement	Random *(By size, color, or shape)* Stable or unstable Directed or undirected
Referents to specific idea or style		Vintage Revival Direct or implied	Contemporary Literal or figurative	Symbolic
Context, Situation, Culture		Economic, social, psychological, cultural, situational values	Complicit artist, or not	Derived meaning, or objective meaning
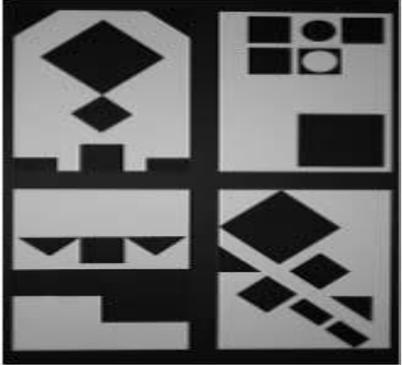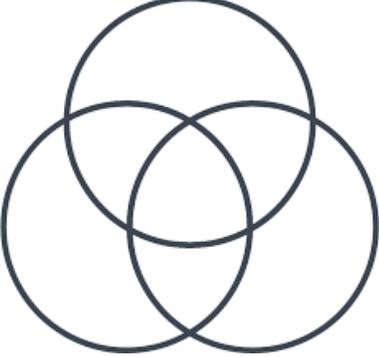
Negative and Positive Space		Figure or ground Form or no form Shading Perspective	Depth Use of space around an object	Interpenetration of space Illusion or reality Placement
Light and Shadow		Suggestive Gradient Perspective	Shading Illumination Solid or Cast	Dimensionality Moon
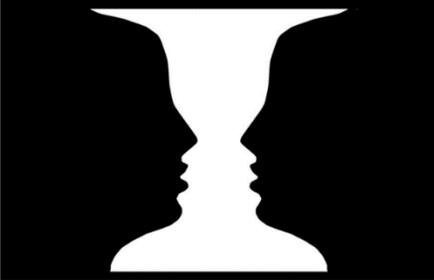
The Japanese Fragrance Garden Bracelet

"Japanese Fragrance Garden Bracelet", by Warren Feld, March 2018, photography by Warren Feld

For example, this is the kind of building blocks thinking I did when designing my Japanese Fragrance Garden Bracelet.

This bracelet has a foundation base. The finishes of these beads in the base are either a luster finish or a dichroic finish. Off the base, I created flower stalks that were 4-6 seed beads tall, and topped with a slightly larger and more brightly colored seed bead. The colors of the beads in the stalks vary from dark (near the base) to light (near the flower tip). Between each bed of flowers is a "moon bridge" – the kind you might expect when meandering through a Japanese garden.

See how I clustered independent and dependent Design Elements to achieve a particular expression.

What I Wanted To Achieve	Design Elements I Thought About
Movement with flower stalks where they would retain their verticality (thus not flop over) after the piece was worn.	**Technique:** Fringing technique **Technology:** Use of One-G beading thread which, unlike all other beading threads, has a springy quality to it. When the fringe is pulled out during wearing, the thread helps spring it back into place **Color:** To mimic how moving colors will be perceived, I varied color in flower stalks from dark at the bottom to medium to light at the top, just under the flower, and then used bright colors for the flowers topping off each stalk **Point, Line:** Easy for viewer to perceive and follow movement of points and lines, which are key elements in the piece
Dimensionality where the piece would not be seen as flat	**Point, Line:** Visually, the flower stalks lead the eye from the foundation base, up the stalks, and to the bright flower colors on top of the stalks. **Color:** I use a reflective foundation base of two types of bead finishes, (a) luster, and (b) dichroic. Both have a mirroring effect, making it difficult for the eye to see the "bottom", and at the same time reflecting the colors sitting above them.
Color Blending where as the eye moves up and down any flower stalk, or moves across the piece from end to end, everything feels coherent and unified	**Color:** I make a wide use of simultaneity effects, where the placement of one color affects the perception of the color next to it. This fools the brain into blending colors, which in reality, you cannot do easily with beads (as opposed to paints). **Shape/Points/Line/Pattern:** There is a consistent repetition of shapes, points and lines, and pattern, leading the viewer to be able to predict what should happen next along the bracelet, and again, fooling the brain into doing some color blending perceptual tricks of its own.

How Do You Teach Designers A Vocabulary of Design?

Most designers most likely start their jewelry making careers taking craft-oriented classes and following instructions in how-to books or online in how-to videos. They learn to repeat a set of steps and end up with something like what is pictured. The whole jewelry making approach assumes that jewelry making is a natural process. Surround the budding artist with patterns, books and videos, and they will somehow become great jewelry designers.

Yet, although the artisans follow a set of steps over and over again, they never learn how to make choices or evaluate implications or get any experience making judgement calls and tradeoffs when designing something that must look good and wear well at the same time. Jewelry making is not a natural skill that is learned automatically. Jewelry designers need to be taught to design.

Towards this end, I think it is much more useful to build an educational curriculum and program around the idea of *disciplinary literacy*. We need to teach designers to explicitly and systematically think *design*. Designers need to be able to recognize the elements that make up a piece, how they were used, and how this leads to more or less success in evoking an expression or an emotional response.

Disciplinary Literacy, means, in part, that the designer is aware of the "*codes*" which were selected for a piece of jewelry. The designer is able to *segment* the piece and identify its Design Elements. The designer is also able to put Design Elements together and *blend* them to achieve a desired expression. The better designer is very aware of all the codes, or Design Elements. The better designer is very aware of how the codes, or Design Elements, were selected, combined, blended and expressed. And the designer is very aware of how and why clusters of Design Elements may sometimes get *bounded*; that is, may be unfortunately stuck within some indeterminant meaning or expression.

Towards this end, this means first teaching designers how to *decode*. It means figuring out what universally accepted Design Elements should be used in a piece. It also means recognizing how these elements can vary, and how such variation can change the artistic or design expression of the piece. Designers need to learn how Design Elements get clustered and constructed to convey certain expressions, and which cannot. To return an analogous example used above, the

Designer needs to recognize the "t" and recognize the "h" and feel comfortable in connecting "t" and "h" into "th". The Designer should be able to begin to recognize that "th" can be further linked to "e", but not "z".

At this stage, we are training the designer to have some comfort recognizing and applying objective, shared understandings about what certain Design Elements mean, and the variations in how they might get expressed within a piece.

As the designer's education progresses, we would gradually reduce the student's involvement with decoding, and increase the involvement with tasks involving *fluency*. This involves more in-depth learning about manipulation and construction. Here the designer is taught how to define a personal style and approach, and implement it. The designer is guided from creating the merely appealing, to the more resounding resonant.

So, to return to our alphabet analogy, the designer is taught to form words, such as with our "t" and "h", and gather additional letters to form a word like "thesaurus". And the designer continues to learn how to use a word like "thesaurus" and further its meaning and expression in a phrase or sentence, such as "I do not like to use a thesaurus."

Lastly, fluency means that the designer has also been taught to look for, anticipate and incorporate context clues. Design does not occur in a vacuum. It has implications which become realized in a context. That context might be historical, cultural or situational. To extend the analogy one more time, we would want to know under what "circumstances" the person did not like to use a thesaurus.

All this gets into the areas of grammar and process management, which I discuss in other articles.[1,2]

Footnotes

[1] Read my article *Jewelry Design: A Managed Process*, Klimt02.net Forum, https://klimt02.net/forum/articles/jewelry-design-managed-process-warren-feld

[2] I discuss a little about shared understandings in a yet unpublished article I wrote about Contemporary Design.   From that article…

> *"Shared understandings* should be enduring, transferable, big ideas at the heart of what we think of as *contemporary jewelry*.   These shared understandings are things which spark meaningful connections between designer and materials, designer and techniques, and designer and client.   We need, however, to recognize that the idea of *understanding* is very multidimensional and complicated.

> Understanding is not one achievement, but more the result of several loosely organized choices. Understanding is revealed through performance and evidence.   Jewelry designers must perform effectively with knowledge, insight, wisdom and skill to convince us – the world at large and the client in particular -- that they really understand what design, and with our case here, contemporary design, is all about.   This involves a big interpersonal component where the artist introduces their jewelry to a wider audience and subjects it to psychological, social, cultural, and economic assessment.

> Understanding is more than knowledge. The designer may be able to articulate what needs to be done to achieve something labeled *contemporary*, but may not know how to apply it.

> Understanding is more than interpretation.   The designer may be able to explain how a piece was constructed and conformed to ideas about *contemporary*, but this does not necessarily account for the significance of the results.

> Understanding is more than applying principles of construction.   It is more than simply organizing a set of Design Elements into an arrangement.   The designer must match knowledge and interpretation about *contemporary* to the context.   Application is a context-dependent skill.

> Understanding is more than perspective.   The designer works within a myriad of expectations and points of view about contemporary jewelry.   The designer must dispassionately anticipate these various perspectives about contemporary design, and, bring some constructed point of view and knowledge of implications to bear within the design and design process.

> We do not design in a vacuum.   The designer must have the ability to empathize with individuals and grasp their individual and group cultures.   If selling their jewelry, the designer must have the ability to empathize with small and larger markets, as well.   Empathy is not sympathy. Empathy is where we can feel what others feel, and see what others see.

> Last, understanding is self-knowledge, as well.   The designer should have the self-knowledge, wisdom and insights to know how their own patterns of thought may inform, as well as prejudice, their understandings of contemporary design.

How the jewelry designer begins the process of creating a contemporary piece of jewelry is very revealing about the potential for success.   The designer should always begin the process by articulating the essential shared understandings against which their work will be evaluated and judged.   For now, let's refer to this as *Backwards Design*[4].   The designer starts with questions about assessment, and then allows this understanding to influence all other choices going forward."

[3] *Backwards Design*. I had taken two graduate education courses in Literacy and one in Planning that were very influential in my approach to disciplinary literacy. One of the big take-aways from ***Understanding by Design*** *by Grant Wiggins and Jay McTighe, 2nd Edition, Association for Supervision and Curriculum Development, 2005,* was the idea they introduced of "*backwards design*".   Their point is that you can better teach understanding if you anticipate the evidence others will use in their assessments of what you are trying to do.   When coupled with ideas about teaching literacy and fluency *(see **Literacy: Helping Students Construct Meaning** by J. David Cooper, M. Robinson, J.A. Slansky and N. Kiger, 9th Edition, Cengage Learning, 2015)*, you can begin to introduce ideas about managing the design process in a coherent and alignable way.