

## The Synectic Trigger Mechanisms: Tools for Creative Thinking

**Subtract.** Simplify. Omit, remove certain parts or elements. Take something away from your subject. Compress it or make it smaller. *Think:* What can be eliminated, reduced, disposed of? What rules can you break? How can you simplify, abstract, stylize or abbreviate?

**Repeat.** Repeat a shape, color, form, image or idea. Reiterate, echo, restate or duplicate your reference subject in some way. *Think:* How can you control the factors of occurrence, repercussion, sequence and progression?

**Combine.** Bring things together. Connect, arrange, link, unify, mix, merge, wed, rearrange. Combine ideas. Combine ideas, materials and techniques. Bring together dissimilar things to produce synergistic integrations. *Ask:* What else can you connect to your subject? What kind of connections can you make from different sensory modes, frames of reference or subject disciplines?

**Add.** Extend, expand, or otherwise develop your reference subject. Augment it, supplement, advance or annex it, Magnify it: Make it bigger. *Think:* What else can be added to your idea, image, object, or material?

**Transfer.** Move your subject into a new situation, environment or context. Adapt, transpose, relocate, dislocate. Adapt the subject to a new and different frame of reference. Move the subject out of its normal environment; transpose it to a different historical, social, geographical or political setting or time. Look at it from a different point of view. Adapt an engineering principle, design quality, or other special quality of your subject to that of another. (The structure of a bird's wing, for example, has served as a model for designing bridges). Transfer can also denote *transformation*. *Think:* How can your subject be converted, translated, or transfigured? (See also METAMORPHOSE and HYBRIDIZE.)

**Animate.** Mobilize visual and psychological tensions in a painting or design. Control the pictorial movements and forces in a picture. Apply factors of repetition, progression, serialization or narration. Bring life to inanimate subjects by thinking of them as having human qualities.

**Superimpose.** Overlap, place over, cover, overlay: Superimpose dissimilar images or ideas. Overlay elements to produce new images, ideas or meanings. Superimpose different elements from different perspectives, disciplines or time periods on your subject. Combine sensory perceptions (sound/color, etc).

*Think synchronistically:* What elements or images from different frames of reference can be combined in a single view? Notice, for example, how Cubist painters superimposed several views of a single object to show many different moments in time simultaneously.

**Change Scale.** Make your subject bigger or smaller. Change proportion, relative size, ratio, dimensions or normal graduated series.

**Substitute.** Exchange, switch or replace: *Think:* What other idea, image, material or ingredient can you substitute for all or part of your subject? What alternate or supplementary plan can be employed?

**Fragment.** Separate, divide, split: Take your subject or idea apart. Dissect it. Chop it up or otherwise disassemble it. What devices can you use to divide it into smaller increments- or to make it appear discontinuous?

**Isolate.** Separate, set apart, crop, detach: Use only a part of your subject. In composing a picture, use a viewfinder to crop the image or visual field selectively. "Crop" your ideas, too, with a "mental" viewfinder. *Think:* What element can you detach or focus on?

**Distort.** Twist your subject out of its true shape, proportion or meaning. *Think:* What kind of imagined or actual distortions can you effect? How can you misshape it? Can you make it longer, wider, fatter, narrower? Can you maintain or produce a unique metaphoric and aesthetic quality when you misshape it? Can you melt it, burn it, crush it, spill something on it, bury it, crack it, tear it or subject it to yet other "tortures"? (Distortion also denotes fictionalizing. See PREVARICATE.)

**Disguise.** Camouflage, conceal, deceive or encrypt: How can you hide, mask or "implant" your subject into another frame of reference? In nature, for example, chameleons, moths and certain other species conceal themselves by mimicry: Their figure imitates the ground. How can you apply this to your subject? *Think about* subliminal imagery: How can you create a latent image that will communicate subconsciously, below the threshold of conscious awareness?

**Hybridize.** Cross-fertilize: Wed your subject with an improbable mate. *Think:* "What would you get if you crossed a \_\_\_\_\_ with a \_\_\_\_\_?"

Creative thinking is a form of "mental hybridization" in that ideas are produced by cross-linking subjects from different realms. Transfer the hybridization mechanism to the use of color, form and structure; cross-fertilize organic and inorganic elements, as well as ideas and perceptions. (See also METAMORPHOSE.)

**Contradict.** Contradict the subject's original function. Contravene, disaffirm, deny, reverse: Many great works of art are, in fact, visual and intellectual contradictions. They may contain opposite, antipodal, antithetical or converse elements which are integrated in their aesthetic and structural form. Contradict laws of nature such as gravity, time, etc.

Think: How can you visualize your subject in connection with the reversal of laws of nature, gravity, magnetic fields, growth cycles, proportions; mechanical and human functions, procedures, games, rituals or social conventions?

Satirical art is based on the observation of social hypocrisy and contradictory behavior. Optical illusions and "flip-flop" designs are equivocal configurations that contradict optical and perceptual harmony. *Think:* How can you use contradiction or reversal to change your subject?

**Parody.** Ridicule, mimic, mock, burlesque or caricature: Make fun of your subject. "Roast" it, lampoon it. Transform it into a visual joke or pun. Exploit the humor factor, Make zany, ludicrous or comic references. Create a visual oxymoron or conundrum.

**Prevaricate.** Equivocate. Fictionalize, "bend" the truth, falsify, fantasize. Although telling fibs is not considered acceptable social conduct, it is the stuff that legends and myths are made of. *Think:* How can you use your subject as a theme to present ersatz information?

*Equivocate:* Present equivocal information that is subject to two or more interpretations and used to mislead or confuse.

**Analogize.** Compare. Draw associations: Seek similarities between things that are different. Make comparisons of your subject to elements from different domains, disciplines and realms of thought. *Think:* What can I compare my subject to? What logical and illogical associations can I make?

Remember, stretching analogies is a way of generating synergistic effects, new perceptions and potent metaphors.

**Empathize.** Sympathize. Relate to your subject; put yourself in its "shoes." If the subject is inorganic or inanimate, think of it as having human qualities. How can you relate to it emotionally or subjectively? Offering helpful insight to an art student, the eighteenth century German painter Henry Fuseli once advised, "Transpose yourself into your subject."

**Metamorphose.** Transform, convert, transmutate: Depict your subject in a state of *change*. It can be a simple transformation (an object changing its color, for example) or a more radical change in which the subject changes its configuration.

Think of "cocoon-to-butterfly" types of transformations, aging, structural progressions, as well as radical and surreal metamorphosis such as "Jekyll and Hyde" transmutations.

Mutation is a radical hereditary change brought about by a change in chromosome relations or a biochemical change in the codons that make up genes. How can you apply metamorphosis or mutation to your subject?

**Symbolize.** How can your subject be imbued with symbolic qualities?

A visual symbol is a graphic device which stands for something other than what it is. (For example, a red cross stands for first aid, a striped pole for a barber shop, a dove bearing an olive branch for peace, etc.)

Public symbols are clichés insofar as they are well-known and widely understood, while private symbols are cryptic and have special meaning only to their originator. Works of art are often integrations of both public and private symbols.

*Think:* What can you do to turn your subject into a symbolic image? What can you do to make it a public symbol? A private metaphor?

**Mythologize.** Build a myth around your subject.

In the 60's, Pop artists "mythologized" common objects. The Coca-Cola bottle, Brillo Pads, comic strip characters, movie stars, mass media images, hot rods, hamburgers and french fries and other such frivolous subjects became the visual icons of twentieth century art.

*Think:* How can you transform your subject into an iconic object?

**Fantasize.** Fantasize your subject. Use it to trigger surreal, preposterous, outlandish, outrageous, bizarre thoughts. Topple mental and sensory expectations. How far out can you extend your imagination? *Think: "What-if" thoughts: What if automobiles were made of brick? What if alligators played pool? What if insects grew larger than humans? What if night and day occurred simultaneously?*

Creative transformation demands an iconoclastic attitude. To invent, one must be contrary and go against established conventions and stereotypes. Remember, inventors create great inventions only by breaking the "rules".

## Art-Think: Ways of Working

- 1. Identity:** Set the problem or task, identify the subject.
- 2. Analyze:** Examine the subject; break it down, classify it.
- 3. Ideate:** Think, fantasize, produce ideas. Generate options towards a creative solution. Relate, rearrange, reconstruct.
- 4. Select:** Choose your best option.
- 5. Implement:** Put your ideas into action. Realize it. Transform imagination and fantasy into tangible form.
- 6. Evaluate:** Judge the result. Think about new options and possibilities that have emerged. Go back to Step #1.

---from "Design Synectics: Stimulating Creativity in Design" by Nicholas Roukes