

A Beginner's Mind

**PROCEEDINGS
21st National Conference
on the Beginning Design Student**

Stephen Temple, editor

**Conference held at the
College of Architecture
The University of Texas at San Antonio
24-26 February 2005**

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Situating Beginnings
Questioning Representation
Alternative Educations
Abstractions and Conceptions
Developing Beginnings
Pedagogical Constructions
Primary Contexts
Informing Beginnings
Educational Pedagogies
Analog / Digital Beginnings
Curriculum and Continuity
Interdisciplinary Curricula
Beginnings
Design / Build
Cultural Pluralities
Contentions
Revisions
Projections

Offered through the Research Office for Novice Design Education, LSU, College of Art and Design, School of Architecture.

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Printed proceedings produced by Stephen Temple, Associate Professor, University of Texas San Antonio.

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Published by:
University of Texas San Antonio
College of Architecture
501 West Durango Blvd.
San Antonio TX 78207
210 458-3010
fax 210 458-3016

Library of Congress Cataloging-in-Publication Data

Temple, Stephen, editor

A Beginner's Mind: Proceedings of the 21st National Conference on the Beginning Design Student /
edited and compiled by Stephen Temple

1. Architecture - Teaching 2. Architecture - Design 3. Design - Teaching

ISBN 0-615-13123-9

Gumption and the Beginning Designer

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I didn't expect that...
I don't know how to continue...
I have too much time...I'm board...
I can't take the cover off, the screw is stripped...
I have to go to the store again...
I am running out of time...
I am too comfortable to move...
I've lost all my GUMPTION! I'm thinking of not going on...

We have a thousand and more rational reasons to lose some or all of our gumption. The word gumption, and why we are comparing how this obscure word can relate to the process of making a designer was inspired by Robert Pirsig's book "Zen and The Art of Motorcycle Maintenance", and his classic discussion of values.

In a recent re-reading of this book we were struck again by the applicability to the design process and the author's essay on the word "gumption." We have all come across the word gumption from time to time, but we may not have really ever understood what the word is trying to be. Pirsig relates to this in the following passage:

I like the word "gumption" because it's so homely and so forlorn and so out of style it looks as if it needs a friend and isn't likely to reject anyone who comes along. It's an old Scottish word, once used a lot by pioneers, but which, like "kin" seems to have all but dropped out of use. I like it because it describes exactly what happens to someone who connects with Quality. He gets filled with gumption. The Greeks called it enthousiasm, the root of "enthusiasm" which means literally "filled with theos," or God, or Quality. See how that fits?

A classic example of Gumption in our history would be a quote from a speech given by President John Kennedy on September 12, 1962 at Rice University: "We choose to go to the moon! We choose to go to the moon in this decade and do other things – not because they are easy, but because they are hard."

Gumption can be a powerful motivator and help bring a nation and mankind together. The history behind this Gumption statement is also an example and how this positive motivation added momentum that provided us with enough energy to overcome the Gumption traps of expectation, myth, weight, fuel, trajectories, consumables and other daunting obstacles that sometimes hindered that design.

Pirsig's main subject matter of gumption analysis in his story is motorcycle maintenance. As professors of design, we are enthused by the parallel between understanding a machine and understanding the design education process. By following Pirsig's examples of 'gumption traps' in motorcycle maintenance we have attempted to extrapolate 'traps' awaiting both the beginning and the experienced designer.

Courage, enthusiasm, faith, confidence, chutzpah, boldness, common sense, ambition, and knowledge...all these words express an attitude designers need to carry out their work. All these words express something we need in balance to keep going even when the way seems

steep or difficult. Gumption for many holds the meaning of all these words with humility and grace. Gumption is a thing we have a lot or a little of. We can lose gumption like a plug pulled out of a drain or we can learn to replace the plug, stop the loss and refill the container. We can teach ourselves as well as our students to recognize a gumption trap from the past, present or future. We can assess the development of a student's gumption not just by their ability to finish a project but also by their finishing well...or as Pirsig would say...with quality.

Each gumption trap encountered does not have to be an end, but if understood properly, each gumption trap can introduce the designer to a new and perhaps better solution. Design is a small % concept and a large % quality execution. We learn to get around and gain form the natural gumption traps that await us in both concept and execution.

There are many gumption traps we can discuss. However, we are only going to introduce a short list that Robert Pirsig mentions and try to relate them to the world of design. Pirsig describes two basic categories of Gumption traps 1) "External Traps" or "Set Backs" and 2) "Internal Traps" or "Hang ups".

An example of a "Set Back" Gumption trap would be when one of our colleagues spent several hundreds of dollars of billable time designing a very expensive reception desk only to find out that it was too big to fit into the freight elevator. This colleague went up that elevator dozens of times! How could a designer not figure the size of the opening into the design program! The solution entailed carefully dismantling the reception desk on site in order to relocate it in pieces into the elevator later to be rebuilt again. The cost of this was only time and a little embarrassment. This trap experience has nothing really to do with the quality of the design, nor the quality of the fabrication. It had to do with the relationship of future experience verses present predictability through past experiences. Getting over the set back traps is an example using the past trap to help predict the future, but in order to take advantage of that knowledge, one has to experience failure to a reasonable degree.

External Gumption Traps may include the following:

External Trap # 1 "The out of sequence reassembly trap"

The "Out of Sequence Trap" is to often a problem for a beginner. The out of sequence that we see most often is the charming design solution that comes about quickly before considering the programmatic, who, or how the object or environment would be used. An example would be a furniture design student who might design a 21st century mailbox basing the entire program design on what they presently need in a mailbox and never considering that a future mailbox could temporarily store things such as food, or even be used for the recycling of junk mail. Another example would be the understanding of the use of a template or jig in the fabrication process, which would actually help eliminate some sequences of the production of an object. Careful observation and study of design process, natural processes and self-awareness mitigates any encounter with "out of sequence setbacks".

External Trap # 2 "The intermittent failure setback"

We are always teaching the awareness of the unintended consequence or unanticipated use. For example, the considerations of Universal Design are anticipation a variety of uses. If a design is well along in its development only to discover an unconsidered problem, the design is set back. Whether demanded by code, ethics, universality, project statement or client the redesign can severely impact the gumption of the designer. This example would be when a student spent several weeks designing a reception desk with a wonderfully poetic use of materials and form just to have a visiting critic during a design development jury say; "By the way, where would a person in a wheelchair sign in?" Now the student has to rethink the entire object and program while maintaining the poetics of the form.

External Trap # 3 “Insufficient Parts Trap”

Making a list and checking it twice is usually not enough. We address the tool and parts issues by challenging our students to make a piece of furniture. Our students are learning to be interior designers. Materials, construction documents, light and color take on a different demand when the students are challenged to complete their own design to a functioning object. The manageable, individual size of a furniture project with an emphasis on quality and completeness brings forward many gumption traps. Most of the time, students don't have any idea what parts they need to make the furniture until they need it. Because of this, our students are encouraged to build full size mock-ups of their pieces to encounter this trap before it's too late. Such a project also coincides with the Sequence Trap mentioned in external trap # 1.

If that material is the last at hand before an important deadline, your chances of mistake are increased. Once again, you have to learn to not let that be the last piece at hand. If it is the last, then the student has to respect it as an athlete does with only one last chance to win. At this point, the student should stop, take a deep breath and be mindful of their focus at the moment. If they are ready, then cut. If you're not ready, then don't cut. This is only a process of knowing yourself. Students who are athletes seem to know this tension and tend to use it to their advantage more than others.

Internal Gumption Traps may include the following:

Internal Trap # 1 “Value Traps (rigidity, ego, anxiety and boredom)”

These are traps that throw you off the quality track by conditions that are primarily within yourself. These traps are especially predictable with beginning design students and our projects have been designed to force the students to engage in these traps. For our program's furniture design class we assign the students to design a useful object for their living environment that they will be able to use in 25 years. This project injects Ego directly into their blood stream on purpose. Robert Pirsig best describes the predicted pattern of the student behavior as follows. *“If you have a high evaluation of yourself then your ability to recognize new facts is weakened. Your ego isolates you from the quality reality. When the facts show that you've goofed, you're not as likely to admit it. When false information makes you look good, you're likely to believe it.”*

In a specific case of another student project, the student thought that just because the design of this multi-functional object looked simple, then therefore it should be simple to create. It was only after the student found out through experience that simply butting the corners together with some glue and nails wasn't going to resist any lateral load applied to it. That was when the *Anxiety Trap replaced the Ego Trap*. Pirsig states:

“Anxiety is sort of the opposite of ego. You're so, so sure you'll everything wrong you're afraid to do anything at all. Often this, rather than “laziness”, is the real reason you find it hard to get started. This gumption trap of anxiety, which results from over-motivation, can lead to all kinds of errors of excessive fussiness. You fix things that don't need fixing, and chase after imaginary ailments. You jump to wild conclusions and build all kinds of errors into the machine because of your own nervousness. These errors, when made, tend to confirm your original underestimation of yourself. This leads to more underestimation, in a self-stroking cycle.”

Virginia S Lee unknowingly relates to the *Ego Trap* in her article titled *Unlearning: A Critical Element in the learning process*, (Teaching Excellence, Vol 14, No 2, 2002-2003). Ms. Lee states; *“Prior knowledge is arguably the single most important factor in learning. Unless we as instructors engage prior knowledge – the good, the bad and the ugly, we risk sabotaging the new learning we work so hard to put in place. Don't we marvel at the misunderstandings students embrace with conviction despite ample classroom instruction and readings to the contrary (e.g., Harvard University's Private Universe project)? And any tennis player who has attempted to*

retool her backhand or golf player his golf swing will attest to the recalcitrance of prior learning. Before the new and far more devastating backhand can emerge, the older, less effective one must wither and die. Paradoxically, unlearning allows new learning to take hold."

Design students tend to get swell headed. We are, after all, designing the best thinkers and doers around. But, as an old school craftsman might say; "On scaffold work never step back to admire your work." We work up high but we need to stay humble. A slight loss of momentum can seem overwhelming if we are full of our own ego. Beginning designers must learn to see the positive aspects of any setback and that is why we encourage as many development critiques as possible. Forcing this attention to the student's Gumption ego makes us pay attention to their individual balance between ego and anxiety. This also helps us build up their confidence if they suddenly need to defend their pattern of thought. Sometimes we do not recognize their own poetry until they have to defend it.

Another internal gumption trap is boredom. Pursig says simply, "When you're bored, stop." We won't do good work. What we do we will probably have to redo. Change routine; take a moment or a lifetime. If a student thinks design is boring, then ask them why they are here? Ask them to separate purpose from fashion.

On the other hand, Rainer Maria Rilke (the German poet) expressed the value of boredom as the feeling that hides the unconscious. When we are bored we should stay at the desk/work table. Find out why we are bored. Let the boredom be the wall behind which may be our most creative solution. Walter Benjiman (in "Illuminations") says (I paraphrase) "Boredom is the nest egg of the imagination."

Internal Trap # 2 "Truth Traps (mu)"

In motorcycle maintenance truth is often the machine not running. In design truth is often less obvious, more like a machine running better or worse. Truth is in the quality and integrity of the design and its outcome. Usually a design is influenced by an abundance of information. Evaluating information for truth is a part of a design process that is too often misplaced (out of sequence) and/or short changed. "Mu" is the Japanese word for the state of "not on – not off." In a non-dualistic pattern of thought we can accept and even depend on the generative quality of "mu".

Internal Trap #3 "Value Traps:"

The inability to see the importance or value of a small part can drain away our desire to find a solution. The small, unseen fastener holding the cover plate onto the motor part that needs our work will not yield until we are able to recognize its (the small fastener's) value. Similarly, our sketchbooks may have one or fifty beautifully drawn concepts. The mistaken mark at the edge of the one sketch may be the leading mark to our most fruitful solution. Are the beautiful drawings more valuable than the mistaken mark? If we assume we know the value of all we see then we are trapped by those values. The relative value of all aspects of our design will impact both concept and execution.

At Virginia Commonwealth University, "*The Design through Nature*" project is the first assignment given to the sophomore beginning design students. This project confronts numerous gumption traps. Students choose two natural objects, "The Fruits and Vegetables". At the initial project introduction values and egos are challenged. "What does this have to do with interior design?" is not an uncommon attitude. Issues of craft are emphasized through naturalistic drawing, cutting the fruits for plan, section and elevation, into abstraction and model building. Our emphasis on craft confronts the "external" gumption traps of sequence, anticipation, materials, parts and tools. At the same time the simple "truth – mu" is awaiting the sophomore's efforts at abstraction. The simple truth and attention to detail are brought into a final set of models

incorporating space, function and circulation. Students are challenged to balance creativity, craft, form and function.

Though a project is set out to confront hazards, we do not lecture on “Gumption Traps” as an idea that the students should keep in mind. Facing more than one problem at once, students are forced to find traps through experience. Our job in small groups or one on one is to help students see avoidance of and/or alliance with gumption traps as their job.

Gumption is a willingness to fail. Even though we might fail over and over again, *Gumption* will be our fuel to continue a task no matter how daunting. Gumption traps, on the other hand are the energy sinkholes that can take away, a lot or a little, a designer’s willingness to proceed.

As inviting and romantic as this rationalization of *Gumption* and *Gumption Traps* can be, a student of design needs to be conditioned with appropriate challenges that will introduce them to these traps in a controlled environment so that they can experience critical feedback as to the direction each took when presented with each un-forecasted trap. The process of design involves more than just images on paper. The reality of design must be applied into actual physical context to understand the full breath of all of the realities that must be solved for each particular problem. Also, one must learn to discard all preconceived images or solutions to a design problem. Every living being on the planet faces design problems everyday, and as designers we face them for a living. One of the single most defining characteristics of quality design is how we deal with the ever-present un-forecast snafus in design executions. If we can teach beginning designer’s to recognize, avoid and even use these *Gumption Traps* of the design process, then we can help them develop *Gumption*.