Society as a social invention and you as a social inventor.

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Everything in the world about you is a social invention. Someone had to think it up, help create it, and help preserve it over time.

You are sitting in a social invention now: the publicly-funded university. Many of you previously attended a subsequent invention--the free access community college--and almost all of you attended an earlier invention--the mandatory public school (or the private school, built in its shadow).

One hundred years ago, most of you would not have even considered going to college. Two hundred years ago, probably none of you would have even known of, much less thought about, college. Now, every year, more and more people go to college, and then on to graduate school, in fact.

The family is also a social invention, and there have been many different forms, not only in other cultures, but even in our own. The so-called "nuclear family", with one male father and one female mother and two or three of their biological children living in a house by themselves, is a very new and fragile invention of the early industrial period. During agricultural times, families were "extended", with grandparents, cousins, uncles, aunts, adopted children and relatives, and perhaps servants or slaves, all living under one roof as a single functioning unit. Tribal families were even more "extended". It is indeed true that it used to "take a village to raise a child". It certainly was not primarily--much less solely-- the responsibility of the biological mother and biological father whose role in rearing their children was pretty much just biological and not social.

Here are some other social inventions to think about.

Ending slavery.

One of humanity's oldest institutions was slavery. Its roots go back perhaps to "ritual" raiding between neighboring tribes, but it became a major feature of human behavior with the rise of "civilization" and imperialism several thousand years ago.

When the United States was founded, only two hundred plus years ago, slavery was a generally accepted principle. While there were some people opposed to it, slavery was so normal and ordinary that it was acknowledged in the Constitution. Thomas Jefferson might have been opposed to it, but he kept slaves and apparently fathered children by at least one of them. George Washington might have been willing to free his slaves too--but only after he died.

What reasonable person could argue against slavery? It was natural. A part of life. A part of human nature. Impossible to get rid of. Some races are just naturally superior, and some others naturally inferior. It is natural for the superior to enslave the inferior. In fact, the inferior people like the protection and security slavery gives them.

Such arguments as these were common everywhere for millennia.

But then some people began imagining a world without slaves, and acting on the basis of their dreams. Maria Stewart made an anti-slavery speech in 1832 in Boston. It "was considered audacious, as women of that time weren't supposed to speak in public."

"In 1851, Eliza Parker was among those arrested for resisting a slaveowner's attempt to reclaim his escaped slaves under the Fugitive Slave Act. The slaveowner was killed and Eliza was put on trial twice before escaping to Canada."

"Sarah Mapps Douglass, a devout Quaker, and her mother helped found the Philadelphia Female Anti-Slavery Society. The Quakers supported abolition but kept Sarah in segregated seating at their meetings."

But slavery did end in the United States. It is true that it seems it took a war between the states to achieve it, but it is highly likely that slavery would have ended sooner or later without the war. People were changing their minds about slavery, and acting on their new beliefs.

[All of the quotes about slavery come from Saundra Sharp, Black Women For Beginners, Writers and Readers Publishing, 1993.]

Ending racial segregation.

I grew up in the American South when racial segregation was not only legal, but required. Blacks and whites went to different schools, sat in different parts of the bus, drank from separate water fountains, and certainly did not intermarry. Even the US Supreme Court said that "miscegenation" (interracial marriage) was illegal, and affirmed that God ordained the separation of the races forever. Exactly the same arguments now used against gay marriages were used against interracial marriages.

I was a well-known "nigger lover" who refused to accept the morality of racial segregation. Like many others, I paid for it, because the law was on the side of the bigots. "You should stick with your kind. Niggers are just stupid animals. Anyway, these things take time, Jimmie. You can't rush it, " I was told. But then someone got tired of waiting for attitudes to change so the law could change, and invented the "sit in". A wonderful social invention. Blacks just sat down quietly and insisted that they be served at a food counter reserved for whites only. Meanwhile Rosa Parks refused to sit in the back of the bus. It wasn't easy, and a lot of racial prejudice still remains, but now all those old laws segregating the races are gone. Even interracial marriages are on the rise everywhere.

Ending colonialism.

Just as many people thought slavery and racial segregation were natural and acceptable, and according to God's will, many people also believed that it was natural for one people to conquer and rule others. Imperialism and colonialism were perfectly all right.

For much of the 19th and early 20th Centuries, England--"The United Kingdom"-- ruled the world: "The sun never sets on the British Empire," it was said.

One country Britain ruled was India. Tiny, remote, England could rule over vast, populous India primarily because of England's technical military superiority, and a world political system that permitted, and expected, colonialism.

Many people in India wanted to throw England out, but terrorism and military methods could not work. What to do? One person, Gandhi, imagined, developed, and in cooperation with many others, used methods of "nonviolence" to achieve what killing and terror would not do. The British changed their minds and left. India was free.

Ending war and deadly violence.

Most people continue to believe that war and state-sanctioned killing is similarly inevitable. That it is part of human nature; always part of the human experience; impossible to eliminate.

Many people disagree. One is Glenn Paige, Professor Emeritus in the Department of Political Science of the University of Hawaii. He has devoted his life to imagining and creating a "Nonviolent Political Science" as prelude to a nonviolent world.

The opening paragraphs of an article on "nonviolent political science" area as follows:

"Political science is a science that can liberate humankind from violence. But first it must liberate itself. This will require five related revolutions: normative, empirical, theoretical, institutional, and educational. The tasks of political scientists at the close of the 20th century are to begin these revolutions. Twenty-first century successors must carry them forward, consolidate them, and extend their influence throughout global society.

"Violence means the threat or use of killing force. Without such violence, other forms of structural repression--economic, class, racial, national, international, and ideational--cannot be maintained. A nonviolent society will be structurally nonrepressive.

"Nonviolent political science is devoted to the removal of violence from global political life and to the realization of nonviolent alternatives. Both tasks must proceed simultaneously. Constructive nonviolent political alternatives must be created at the same time that conditions previously conducive to violence are eliminated."

(From Social Alternatives, June 1980)

Professor Paige then goes on to spell out, clearly, and in detail, how to develop the values, data, ideas, institutions, and education necessary to move from a world which accepts killing as natural and good, to one which considers it, and makes it actually be, unacceptable and rare.

Does that sound impossible to you? So did ending slavery and colonialism a century ago. But they are both ended.

To be sure, we are not living in a utopia, with no problems or worries. Racial bigotry and violence still remains. Nations continue to dominate other nations, and we have just witnessed a horrendously violent backlash to that fact. Forms of slavery still exist in parts of the world. But, I believe, we have improved in these ways, and can and should continue to do so.

One of the things that has to happen is that some one, and then many people, need to imagine that a world without war and "legitimate" killing violence is possible, and then (as Prof. Paige does) seek to create all of the conditions necessary to achieve it.

So dream--whatever your dream is. If you don't ever dream, how are you going to make your dream come true?

How to Become a Social Inventor.

To be sure, there is more to making your dream come true than just dreaming it, as important as that dream must be. You need to become a "social inventor."

How can you do that?

In order to be a successful social inventor, you need think in at least two different ways.

The conventional--and necessary--way of thinking involves the ability to observe and understand what is happening; knowledge of important, real, facts and past situations; good memory and recall of those facts and experiences; and the ability to put these facts and observations together accurately, quickly, and in a logical manner.

This kind of thinking is also sometimes called "convergent thinking". Convergent thinking usually assumes that there is a single best answer or solution to any question or problem, and that this correct answer is probably already known by the person asking the question. Your job is merely to find that correct answer and to find it as quickly as possible.

I hope you have mastered that way of thinking. It has probably been the focus of most of your formal education to this point. Most of your tests--especially "objective tests" like multiple choice, matching, or true/false tests--assume convergent thinking. It is important to know facts and to be able to reason logically this way.

But you need to think creatively as well, and creative thinking involves the ability to generate many new ideas; to recognize alternative possibilities and not to get stuck in just one or a few conventional ways of doing things; to make unexpected and unfamiliar connections between things previously kept or considered separate; and to have the courage to state and perhaps even try out unusual ideas and practices.

There is, I might also add, "critical thinking" which looks for fallacies in logic, or hidden agendas in what people say, but let's leave that aside for the moment.

Arthur Cropley said that "research in a number of different countries indicates that teachers almost universally prefer children who are:
> courteous and considerate of others,
> punctual,
> energetic and industrious,
> popular with their peers,
> 'well-rounded',
> receptive to other people's ideas, and
> obedient.

"It is noticeable that properties such as willingness to take risks, to be innovative, bold, flexible, and original are all [absent] from this list. Thus there are grounds for believing that teachers greatly overvalue behavioral and personal properties that are not normally characteristic of creative pupils." (Arthur Cropley, More ways than one: Fostering creativity. Ablex Publishing Corporation, 1992, p. 19)

Now, the word "creativity" is often used to mean this kind of divergent, or lateral, thinking in contrast to linear, logical, convergent thinking. Thus anyone can be taught to think

"creatively" as well as "logically" though each person may prefer, or be better at, one or the other.

But at other times, "creativity" is used in an esthetic or professional sense to designate what people like Michaelangelo or Einstein have that ordinary people do not, and perhaps cannot, have. For the purposes of learning to become a social inventor, I am more interested in helping you become a "divergent thinker" than a great painter or theoretician.

I am interested in helping you think more easily in innovative, original, free, open, bold, "lateral", and hence "divergent" ways so that you can imagine, and help create, appealing and effective solutions to the many problems facing humanity now and in the future, and also so that you can see, in the future, new opportunities and challenges to humanity which most people may not see in the present.

I am also interested in helping you think of "alternative" and "preferred" futures in a holistic, systemic, and integrated way, rather than in a fragmented and piecemeal fashion.

Futurists as architects.

The closest example to what I have in mind here is probably found in the ways in which a faculty of architecture tries to help people to become good architects (in contrast to the way law schools teach people to become successful lawyers).

A good architect needs to be visionary and imaginative, not essential primary traits for a lawyer who needs to be grounded and analytical--though there also are situations where creativity is necessary for a lawyer as well, just as an architect needs to be factually informed and practically grounded also. Nonetheless, a good architect needs to "see" things which ordinary people cannot see, and to see them whole and functioning--to see a new building (or maybe an entire community) actually in use on a physical site before it is built.

In addition to being "visionary", architects need to be "creative" in the sense of being able actually to make their dreams come true--to "create" the building, so that it stands up as intended, functions as planned, and is esthetically pleasing inside and out. In order to do that, architects need a good understanding of physics, chemistry, materials and other aspects of hard "science" and engineering.

At the same time, an architect needs also to be a good, practical, and effective manager, not only of the people who actually do the digging, laying, building, and finishing (so that things are done in proper sequence, on time, with minimal delays and errors), but also how to obtain and manage the finances necessary to "meet the payroll" for all the many and varied workers involved.

In addition, architects need to be aware of all of the health, safety, and similar rules and regulations, and how and where to obtain all of the various permits which law and society requires of any new construction. And they must be skilled at the "politics" involved in negotiating the gamut of permissions, union rules, community concerns, clients' whims, and all the other human factors which must be tended to promptly and smoothly.

In my article, "Futures studies as applied knowledge," I have listed what I believe to be the "attributes of a futurist." You will see that what I have described about a good futurist is very similar to what I have just written as the characteristics of a good architect. I believe the two are similar. They both need to combine historical, scientific, esthetic, ethical, economic, legal, and political skills with imagination and creativity in a way extraordinary--but necessary--for our society.

In addition to intellectual skills, creative ways of thinking require motivation, and especially courage--the courage to be different, to not have the same thoughts as everyone else, to stand out, and sometimes--perhaps often--to be wrong, while at other times, to be stunningly correct while the "common sense" "realistic" view that "everyone" "knows to be true" turns out to be wrong, harmful, or useless.

That is one reason why I insist that a sense of humor (about yourself and your own limitations) and a sense of the absurd (recognizing the fundamental meaninglessness of it all, while still "doing your best"; being sensitive and sympathetic to the beliefs and feelings of others, and certainly not dogmatically insistent on "the truth" of your own perceptions) are also essential features of a good futurist.

Well, how can you acquire--or, more likely--how can you unleash this kind of creativity?

Just do it.

The simplest answer is: "Just do it."

You have my permission to be creative, wild, outlandish, brash, bold, perhaps absurd.

And then to be practical, realistic, down to earth--"creative" in the more literal sense of "creating" (bringing into being) your wild and outlandish ideas in a way that then makes sense to others, appeals to them, and satisfies their needs and concerns.

So, just do it.

For some of you, that may be all you need: permission to let go. For others, more may be needed. Your "personality type" may not be comfortable with such "creativity." It may seem foolish, wasteful, maybe dangerous to you. You feel more comfortable with facts; with being told clearly what to do, and then strictly doing it.

I understand that. I know there are such "personality traits" that seem to be acquired in the womb, so firmly do people seem to hold on to them. So, just do the best you can. Go to whatever YOUR limits are, and slightly beyond. Do it as a test, an exercise, an experiment. You can always snap back to your more comfortable mode of thinking and behaving.

On the other hand, some of you may in fact be trapped in a "conservative" way of thinking and acting because of years of socialization and training. Your parents, teachers, and peers have perhaps for years told you to stop being different and just be "normal" like they are. Pressures towards conformity are very strong in every community, but especially strong here in Hawaii.

You have heard it a million times: "Don't make 'A'". "The nail that stands out gets hammered back down." "To get along, go along." "If it ain't broke, don't fix it" (and maybe don't try even if it is).

Some people may even have convinced you to believe that it is the "Hawaiian" (or "local") way to keep your mouth shut, your thoughts to yourself, and to just do what everyone else is doing. Only the "haoles" (or Portuguese!) are the show offs with the big mouths, acting out and getting themselves and everyone else in trouble.

There is a lot of truth in that! There are, broadly speaking, cultural differences as well as individual personality differences, in saying what is on your mind, in "sticking up for your rights", in "doing it my way", rather than just "going with the flow."

But every culture has a role for its creative deviants--the court jester, the village idiot, the mad scientist--because variety and creativity is socially necessary. It is a way of being able to adapt successfully to changing circumstances, or to see ways of doing better what you are already doing.

Businesses, now especially, are urging their employees to be creative instead of only obedient. In a situation of severe competition and change, such creative foresight is necessary for survival, and certainly for success, of each individual as well as each business firm.

And isn't that also true of all societies everywhere in the world today, including here in Hawaii?

So do you best. Be as creative and imaginative as you possibly can.

Characteristics of creative individuals include:
Awareness of and concern about the existence of problems
A good memory of lots of facts in varied fields.
Fluency (the ability to generate a large number of ideas easily and quickly in
   many different forms, not just as words, but also as visuals, sounds, smells,
etc.)
Flexibility (the ability to produce a wide variety of ideas)
Originality
Self-discipline and persistence
Adaptability
Intellectual playfulness
Humor
Nonconformity
Tolerance of ambiguity
Self-confidence
Skepticism
Intelligence

There are many techniques which people have devised to help themselves and others to become more creative. All of them are intended to "get you out of your mind"--your logical, rational, linear, convergent mind--and into a state so that you can more easily dream undreamt dreams, imagine the unimaginable, make unmade connections, and in general, boldy go where no one has gone before.

Some techniques for unleashing or enhancing your creativity are:
--Brainstorming (probably the best known method for being "creative"--just thinking of as many crazy things as you can without anyone criticizing you, responding negatively, or asking you how it is possible, all of which must come later).
--Quickly generating as many different metaphors and analogies for a thing as possible.
--Separating a thing from its normal function--asking how many things you can do with a "pen" other than write with it; or instead of trying to invent a new "ladder", thinking of all the ways you can "get off the ground."
--Reversing everything so that you state, for example, "airplanes should land upside down" or "the wheels on automobiles are square", and then thinking through the implications if this were actually so.
--Looking at things from different angles, literally and figuratively; perhaps "becoming" the thing itself, getting inside it, as well as on top and around it. Asking how it feels, smells, sounds (even if it is, for example, a legislature--something not usually associated with touch, smell and sound--until you think of it that way!).
--Using random inputs--just putting together two or more things that aren't normally connected, perhaps by looking up words randomly in a dictionary.
--Permitting no dichotomous, either/or choices. There MUST be more than two solutions to everything--even if it is just an endless series of two choices: If you are given a choice of a or b, chose a (for example), but then force a choice between a and c, and then c and x, and so on.

Without a doubt the most famous and influential consultant on creativity is Edward de Bono, who long ago (in the 1960s) wrote a book on "Lateral Thinking". An expert, de Bono said, is a person who digs the same hole deeper. In order to be creative, you need to get out of your hole, and take a peek in as many different holes as possible, combining them together in ways an "expert" would never even think of doing--and may not even permit you to do!

In a book on creativity, written for his engineering students at MIT, Steven Kim makes a similar point: "Almost always the men who achieve these fundamental inventions of a new paradigm have been either very young or very new to the field whose paradigm they change."

And that seems to echo one of Arthur Clarke's "Laws about the future" which is that when a famous but elderly scientist says something is possible, he is probably right, but when

he says it is impossible, he is probably wrong (and that some young and as yet unknown scientist is probably already doing it).

Among the many things that de Bono has done is to recognize that brainstorming and wild ideas are only part of a process that involves more than just creativity alone--but which also must be sure that creativity is a major part.

De Bono also recognized that different people feel more comfortable playing different roles in the creativity/problem-solving process. Some people find it very easy to be creative-- but are extremely impractical. Others are very quantitative and analytical, while others are emotional. Some always see the dark side of things while others only see goodness and light. Some are good implementors but bad creators, and so on.

DeBono's six thinking hats.

De Bono came up with a--shall I say--"creative" solution to THIS problem. He invented the concept--and reality--of the "Six Thinking Hats," each with its own distinctive color, to reflect six different ways of thinking and acting needed in the overall creative problem solving process.

There is first the Green Hat. "Think of vegetation and rich growth," de Bono says. "The green hat is for creative thinking, new ideas, additional alternatives, for putting forward possibilities and hypotheses. The green hat covers "provocation" [stating the opposite of something] and movement [viewing an idea from many different angles]." " The green hat makes time and space available for creative thinking." The green hat is thus like the usual brainstorming session.

But there are more hats than just green ones which need to be worn.

There is the Yellow Hat. "Think of sunshine. The yellow hat is for optimism and the logical positive view of things. The yellow hat looks for feasibility and how something can be done; for benefits--but they must be logically based."

Next comes the Red Hat. "Think of red and fire and warm. The red hat has to do with feelings, intuition, hunches, and emotions. The red hat gives people permission to put forward their feelings and intuitions without apology, without explanation, and without any need to justify them."

The Black Hat is "the caution hat." "Think of a stern judge wearing black robes who comes down heavily on wrong-doers. The black hat prevents us from making mistakes, doing silly things, and doing things which might be illegal. The black hat is for critical judgment. It points out why something cannot be done or why it will not be profitable." "The black hat is very valuable but overuse of it can be a problem."

The White Hat is neutral and carries information. It has to do with data and information. What information do we need, what is missing, what would we like to have, and how are we going to get that information?

And finally there is the Blue Hat. "Think of the sky and an overview. The blue hat is for process-control. It sets the agenda. It suggests the next steps. The blue hat can ask for other hats. It asks for summaries, conclusions, decisions." "The blue hat is for organizing and controlling the thinking process so that it becomes more productive. The blue hat is for thinking about thinking." (All quotes about the six hats are from de Bono's *Serious Creativity*, pp. 77-81).

De Bono is serious about these hats. People who participate in his group creativity, idea-generating, and problem-solving sessions are actually expected to wear these colored hats at the appropriate times. It is also very important that an equal amount of time be allotted to each of the six hats; that everyone who is part of the process wears the same hat at the same time and contributes as best she can at each phase of the process; and that no one says anything which is the proper domain of the other hats when the time has been assigned to any one hat:

No saying something won't work, when you are wearing your green hat!
No saying there are no data when you are wearing your red hat!
No saying you don't like the idea when you are wearing your blue hat, and so on.

There will be a time for showing why the bright idea will fail, that it needs data no one has, or that you don't like it under any circumstances. Just wait until the appropriate time comes.

An instructor once asked each member of the class to depict a "problem-solving model" after they had listened to him present a lengthy discussion of creativity, such as the one you have just endured. The instructor expected to get a lot of words and diagrams from his students describing how to identify and solve problems creatively, such as the ones I have just given to you. And he did get a lot of "convergent" answers like that.

However, one response to the "problem solving model" assignment came from a student named Beth who drew a picture of a girl she labeled "Brooke Shields" (Robert Brown, "Creativity: What are we to measure?" in Glover et al., eds., *Handbook of Creativity*. Plenum Press, 1989, p. 11).

Beth drew a cartoon-like dialog balloon, which had Brooke saying:
"Hi! I'm a problem solving model! I have many problems to solve! Who to date? What to wear? How to handle my money and my mom? Whether to keep on being a virgin?"

Models have lots of problems to solve, it seems.

So, was that a creative solution to the problem the teacher assigned--or was Beth just being a smart-ass?

What do you think?