Environmental Stewardship, A Community Approach

CSVA 2009 Conference Ottawa, Ontario

Nov 23, 24, 2009

Planning By People

Chris Jalkotzy

cjalk@rogers.com

Value Engineering
Knowledge and Behaviour

Design Team	Client	Occupant	Others
Architects	Managers	Staff	Building operators
Engineers	Designers	Managers	Cleaners
Facilitators	Costing	Executive	Maintenance
Planners	Planners		Services
Specialists			
Costing			

Value Engineering
Leadership

	Concept	Design	Construction	Commissioning	Occupancy
Design Team	x	**X**	**X**	**X**	
Client	**X**	x	x	x	x
Occupants	x	X	x	X	**X**
Others		x	x	X	x

Neuro Sustainability

Distinctive human characteristics
(physical, behavioural, cultural)

Bipedality

Lack of body fur

Large brain

Free thought, imagination, playfulness, adaptability, social evolution

Speech

Whites of eyes

Hunting big game

Tools & weapons

Clothing

Weaving

Dwellings

Pottery

Boats

Herding

Fire

Writing

Trade and gift-giving

Agriculture

Civilisation

Industrialisation/urbanisation

Substance abuse

Religion

Burial of dead

Large penis

Concealed ovulation & constant availability

Private copulation

Large breasts

parental care by fathers

Small litters

Monogamy + EMS

Longevity

Menopause

Variation in skin colour etc between races

Variability between individuals

Neuro Sustainability

BEHAVIOUR

Genetic
- – Innate

Learned
- – Social

Imposed
- – Physical Environment

Neuro Sustainability

<u>Behaviour Traits</u>

Genetic Examples

Walking

Learned Examples

Religion

Imposed Examples

Driving

Language

Clothing

HVAC Control

The Neuros

Neuroanatomy

Neurobiology

Neurochemistry

Neuroeconomics

Neuroergonomics

Neuroendocrinology

Neuroesthetics

Neuroethics

Neuroethology

Neurogenetics

Neurogenomics

Neuroheuristic

Neuroimaging

Neurolinguistics

Neuromarketing

Neuropharmacology

Neuro-phenomenology

Neurophilosophy

Neurophysiology
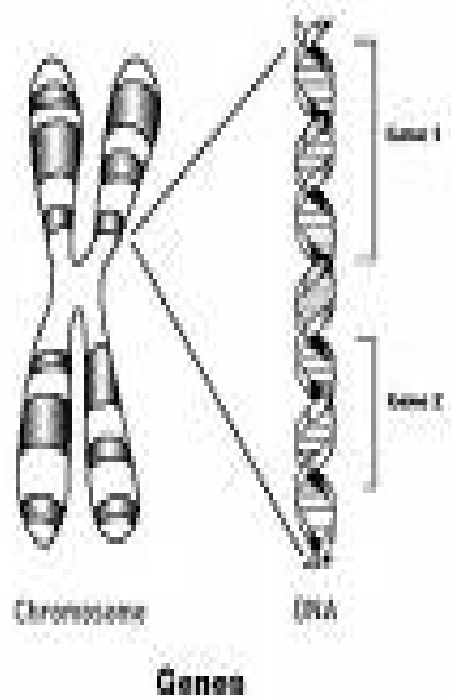
Neuroproteomics

Neuroprosthetics

Neuropsychiatry

Neuropsychology

Neuropsycho-pharmacology

Neurotheology

Sources of Behaviour

50% Genetic

0 to 10% Upbringing

40 to 50% social and physical environment

Neuro Economics

To Buy or Not to Buy, Is that the Question?

Can you predict if a person will buy something just by viewing and MRI?

Yes, you can.

Neuro Sustainability

To Consume or Not Consume, That is the Question!

Is the consumption of an innate behaviour?

Don't know

Neuro Sustainability

Hopeful Patterns of Behaviour

Social Environment

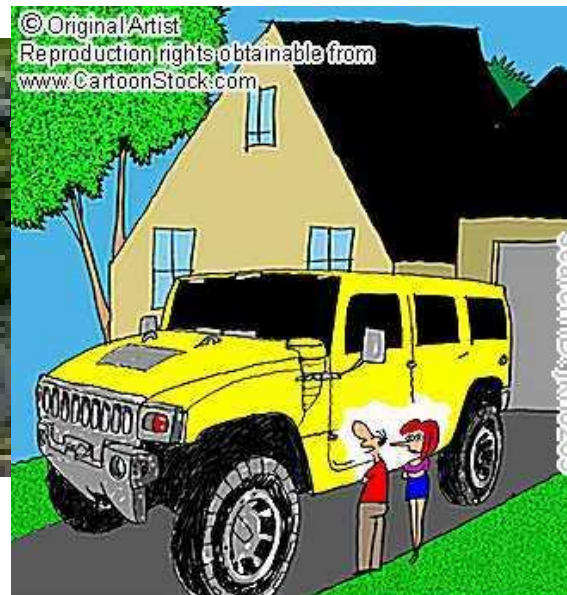**Physical Environment**

Neuro Sustainability

Disturbing Patterns of Behaviour

Building

Cars

Gadgets

"It takes 5 gallons and $127 to go to the end of the driveway, but it's worth it. I only wish it came in a larger model."

Ethics

We make decisions every day, we probably consider ethics as part of our everyday value system, but how consciously do we apply ethical values???

	Urgent	Not Urgent
Important	**Necessity** Here we do what we genuinely must.	**Originality** Here we define our authenticity and frame the great contributions we are capable of.
Not Important	**Deception** Here we can let systems steal our chances to be authentic.	**Waste** Here we can squander our chances to be authentic.

What we ask you to do is incorporate ethics as a conscious element of the decisions you make, you will then more likely make sustainable decisions

Behaviour Matters

Level	Identifiable differences							Behaviour changes								
	Capital Cost		Energy	Maint	Human Productivity	GHG/CO2	IAQ	Plug loads	Temp tolerance	Recycling	water/sew	transp[ort	open windows	access floor	daylight	open plan
unit	100 base	100base	100 base	100 base		100 base		W/ft2								
	Building	Building Plus														
Market	90		120	130	neg	120	neg	6	inadequate	neg	120	neg	none	no	base	least
Silver	95		100	100	base	100	base	3	0	base	base	base	yes	no	improved	some
Gold	105		75	80	+	80	+	1.5	"+/- 5	+	80	+	active	yes	aggressive	More
Platinum	120		50	60	"++	60	"++	0.75	"+/-10-15	"++	50	+	active	yes	aggressive	Most
Living Building	120	10	0	80	"++	0	"++	0.75	"+/-10-15	"+++	0	"++	active	yes	aggressive	Most
ReGenerative Building	120	50	contribute	80	"++	reverse	"++	0.75	"+/-10-15	"+++	"+++	"+++	active	yes	aggressive	Most

Qualitative Drivers

Imagine YOURSELF making this presentation to colleagues sometime in the future

"We started with an existing building, constructed in another time."

"We worked with our employees, we thought about our environment, considered the taxpayer and remembered that we are not the last generation on this planet."

Qualitative Drivers

"Now we have a workplace
our employees are proud to work in;
a building that has reduced
its impact on the environment
in its renovation and operation
&
we spent the taxpayers dollar wisely."

New Community through Social & Physical Environments

Why Plan?

Clear Vision	➡ stating and sustaining project objectives
Good Data	➡ detailed information: baseline data
Integrated Strategy	➡ balancing needs of people / place / process
Buy in	➡ achieving support from staff at all levels

Why at a community level?

Getting Work Done	➡ effective operation
Occupants	➡ improved retention, high levels of satisfaction
Costs	➡ reduced operating and call centre costs
Environment	➡ enhanced biodiversity
GHG	➡ reduced emissions
Occupant Engagement	➡ ownership

Value Engineering
Innovation Factors

	Technical Info	Thinking Space	Communication	Responsibility	Buy In
Individual - Expert	**X**	X	x	**X**	x
Group - Expert	**X**	X	x	x	x
Individual - Layperson	x	x	**X**	x	**X**
Group - Expert & Layperson	x	**X**	**X**	**X**	X

Value Engineering
Success Indicators

Design Team	Client	Occupant	Others
On time, on Budget	On, time on Budget	Proud to work in Space	Easy to maintain and operate
Client Satisfaction	Occupant Satisfaction	Happy with design – build process	Lower operational Cost
Internal Pride	Proud to work in space	Healthy place to work	Proud to work in space
Awards	Lower operational Costs		Healthy place to work

What is a Green Stewardship?

Green Stewardship can be defined as the integration of environmental principles into everyday activities.

"An people-based initiative to promote and facilitate environmentally responsible practices in the workplace."

Green Stewardship Committee

- Governance
  - Sustainable Development Strategy

  - Green Stewardship Policies

  - Action Plan,
    - Baseline
    - Targets
    - Measuring progress
    - Informal

The Knee-Jerk Reaction Committee

Green Stewardship Committee

•Categories of activities

   •Water, waste, energy

   •Commuting

   •Travel

   •Building Maintenance

   •Environmental days

   •Outreach / education

Green Stewardship Committee

Is there a communications strategy with tenants regarding environmental initiatives and practices in their building and to respond to tenant concerns?

Are there communications to tenants on the environmental measures that they can implement in the building to contribute to:

• Energy conservation?

• Waste reduction and recycling?

• Proper handling, storage and disposal of toxic products?

• Has a tenant satisfaction survey been completed in the last 3 years?

Thoughts

Occupants are our most important asset