



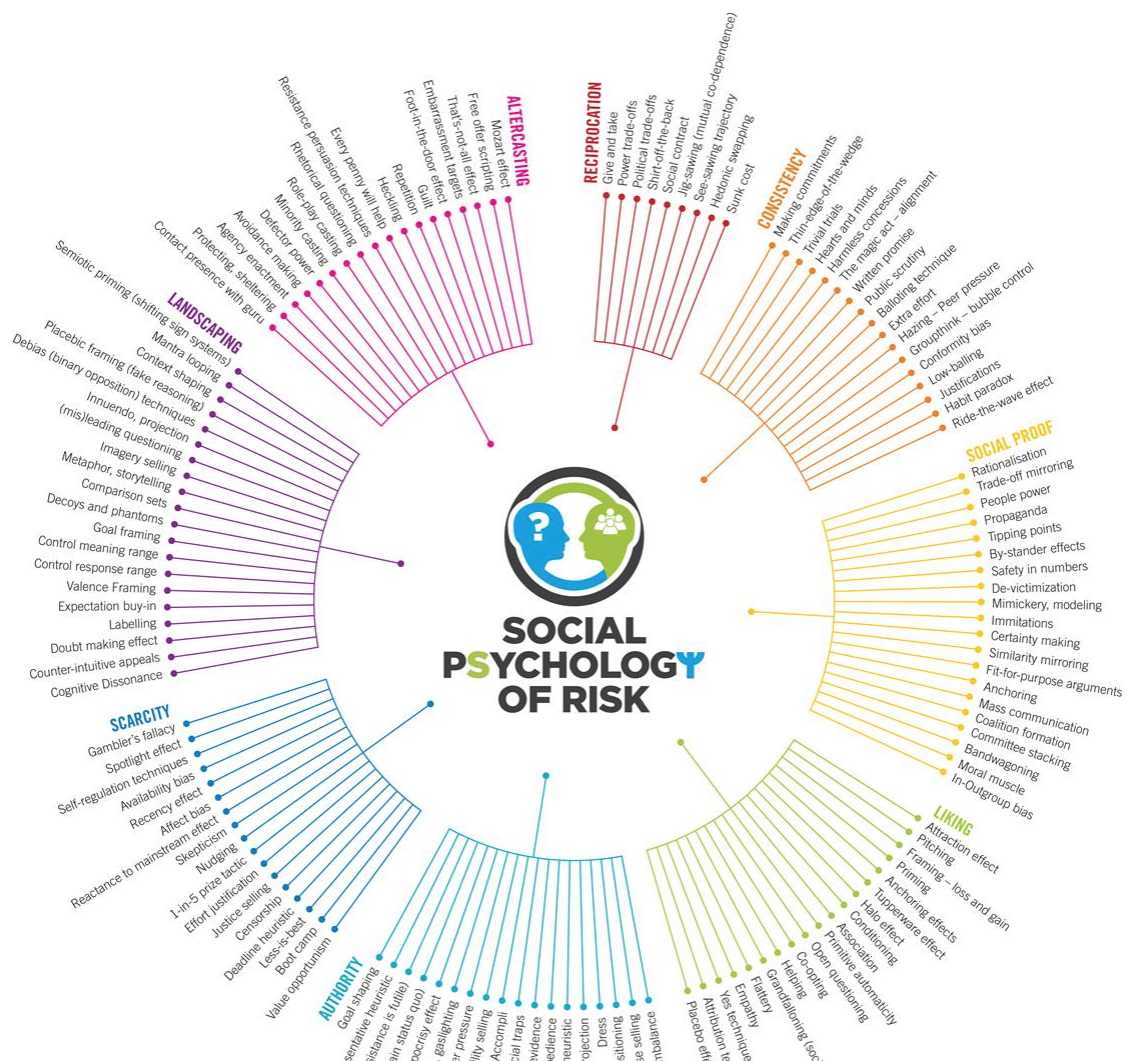
## Quarterly Newsletter

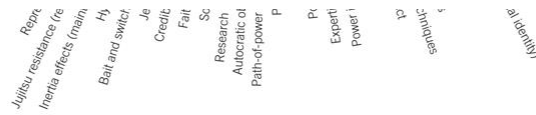
# THE CENTRE FOR LEADERSHIP AND LEARNING IN RISK

## Theme - Affordance

The Theme for this Quaterly Newsletter is the nature of Affordance. Affordance is the way context, objects and social presence 'afford' a response.

## Affordance and Risk





All objects give off an 'affordance', they communicate and 'invite' us unconsciously to the purpose of their design and tell us how they want to be used. We also learn the affordance of objects according to learning in culture through conventions, routines and habits in context. Once the use of an object has been made a heuristic and habit, we use such objects unconsciously. The rules and principles for use become embodied through shaping muscle memory so that the object as a symbol tells us quickly how to use it without thinking'. This is how we use a chair, cup, shovel, towel, glasses, wheelbarrow or bed. All these objects 'afford' doing 'x'.

All of our surroundings and objects afford certain actions. It is possible to use these objects in other ways eg. standing on a chair, but in general most objects have a principle mode of use as embedded in design. If we want to understand how the world influences us then one thing to study is the nature of affordance. Coupled with the study of affordance is the nature of design, the human unconscious, heuristics, archetypes, social influence, wicked problems, implicit/tacit knowledge, unpredictability, risk and homologies (shared historical and biological structures).

In the ordinary daily world we assume a range of things in how we interact and enact in our environment, mostly this is unconscious. Our perceptions, visual system, embodied mind and the way we 'resonate' with our environment works in a mutual way. The way we interact with our world, resonate with our world and are interaffected by our world is sensed as seamless and coherent. This gives us a sense of belonging and connectivity to the world and helps us make sense of how to interact with it and persons in social ways.

However, when things don't seem to match our assumptions about objects, settings, design purpose, social gathering and incoherence, we get anxious, depressed and disoriented. In most settings we have learned to assume certain attributed affordances and we hope they match our experienced affordances. When the two do not align we can become destabilized and our world seems incoherent. This is often the foundation for the later experience of Cognitive Dissonance (CD). CD is not just some sense of discomfort but should convey a deep sense of trauma in potential loss in identity.

Affordances can be physical, psychological, social, cultural and even transcendent. In groups, organisations and society we think of these affordances as homologies that is, structures that present opportunities and possibilities that most agree upon.

I find it interesting when I have conversations with people interested in Safety in Design that they have little interest in the human unconscious and the complexities of affordance. Whilst the interest in safety in design is cognizant of ergonomic principles, these tend to be primarily focused on the object-subject interaction rather than holistically focused on the object-embodied subject-unconscious dialectic. If we seek to understand why people as they do, we should be exploring more into Holistic Ergonomics than what is on offer from orthodox ergonomics. Orthodox Ergonomics tends to leave the human unconscious out of the equation, a classic example is the foundational primary text: Kroemer and Grandjean, *Fitting the Task to The Human*. This is an excellent text only if one assumes ergonomics is about just the physical world. The text excludes any discussion of affordance.

In many ways affordance denotes an invisible language. A language that offers ‘cues’ to participants and most importantly, cues between participants. In SPoR we call these iCues, intelligent cues that we seek to recognize as indicators of risk. The shared and agreed affordances we call homologies and are experienced in activities: like waiting in line; taking turns, give and take, groupthink and the halo effect. I position many of these homologies in my Mapping Social Influence Strategies poster (Figure 1).

You can download this poster here: <https://spor.com.au/downloads/posters/>

When we explore the perspective of Human Factors research many of the critical understandings of a Social Psychology of Risk (SPoR) are missing. When one understands humans as just a 'factor' in a system, one misses the holistic focus of the human ecology embodied, enacted, interaffected and intercopreal. This is the focus of Holistic Ergonomics that we study at the Centre for Leadership and Learning in Risk (<https://cllr.com.au/product/holistic-ergonomics-unit-6-elearning-face-to-face/>)

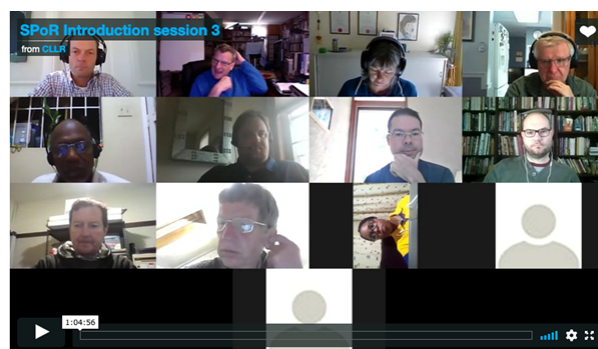
If you would like to learn more about affordance, emergence, embodiment and risk email [rob@cllr.com.au](mailto:rob@cllr.com.au)

## Report on Free Workshops During Lockdown

Just a quick note on the four workshops running during the Covid-19 crisis:

- Advanced Semiotics Masterclass
- Writing Skills Workshop
- Introduction to SPoR and,
- Book Club

Each group has been progressing well with 6-20 members in each. These free workshops were offered through the Centre for Leadership and Learning in Risk closed facebook group, this newsletter and <https://safetyrisk.net/>



Those who have been zooming each week have been appreciative of the opportunity and the learning.

Depending on when these groups close perhaps in June or July, a new set of free groups may be on offer. Keep your eye out and register if this is of interest.

## Are We Born With Affordances?



In the May/June issue of Scientific American Mind we learn of the recent work by Daniel Diks (Emory University). Diks studied 30 infants aged from six to 57 days old investigating the neural wiring of the brain for specialized 'programmed' knowledge.

We already know that a new born baby knows how to suck and hold. What other affordances seem to be set? We know also that babies recognize their mothers smell, voice and resonance.

The team with Diks used rsfMRI to measure the level of synchronization in brain regions to assess how connected they were with some of these enactments. In particular they explored the V1 region of the retina to see how developed it was to receive the recognition of faces. Results demonstrated that this area of the retina is highly developed at birth so as to heighten face awareness and differentiation from birth. This is also supported by similar research (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4496551/>). Work by Thomas Fuchs (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4047516/>) and others also demonstrates that movement, emotion, posture, gesture and interaffectivity is set at birth so that babies and mothers 'know' and feel tacitly for each other. Resonance is embodied at birth so that



the baby knows its socialitie (social beingness) at birth.

## Competition - Perception

One of the primary reasons for running a competition each newsletter is to reinforce the nature of visual perception.

**Accordion to scientific studies,  
90% of all people don't realise,  
that I replaced the beginning  
of this sentence with an  
Instrument.  
They have my symphony.**

Such simple exercises as the above demonstrate that humans don't read in detail but take in text as affordances by shape and structure. Such is demonstrated also in my One Brain Three Minds Model (1B3M) of human decision making. Visual perception in humans is mostly constructed culturally but also because of the way vision is bodily integrated into the human body. The human eye is nothing like a camera and such a metaphor is completely misleading. One cannot think about physical vision unless one understands how vision is embodied.

We learn to read by glancing at text and interpret text by heuristics. My next book Envisioning Risk spends a great deal of space exploring the nature of physical, psychological and transcendent ways of vision.

For the moment here is the perception puzzle. Can you see the cat in the library? If you can, send your response to: [admin@cllr.com.au](mailto:admin@cllr.com.au) and make sure your response includes your snail mail address.

The first 5 correct entries will receive a complementary copy of the latest book: The Social Psychology of Risk Handbook, i-thou.

## Find the Cat in the Library

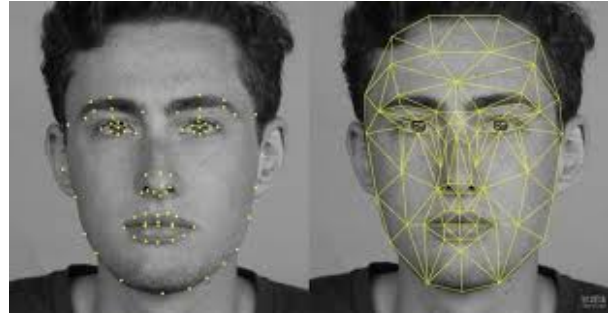




email your entry with nail mail address to [admin@cllr.com.au](mailto:admin@cllr.com.au)

## Face Recognition and Dangerous STEM-only Thinking

Douglas Heaven ('Expression of Doubt', **Scientific American Mind** May/June) documents recent efforts by tech giants to predict human emotions using facial recognition technology, algorithms, what is called 'machine learning' and predictive analytics. This is dangerous stuff as there is no machine that can 'learn'.



Learning in and of itself requires the need for embodiment (computers have no bodies), feelings (computers don't 'feel'), self consciousness (computers have no unconscious) and self-enacted movement (computers have no self generated nervous, endocrine or immune systems). The repetition of algorithms, regurgitation of data and enactment of computing is not learning.

If we confuse learning for training and education for a collection of self-replicating algorithms, we completely miss the meaning of personhood and human fallible 'being'.

I find it fascinating this exaggeration of 'technique' and mystique people have about such things as facial recognition, Artificial Intelligence and so called 'machine learning'. This idea that face recognition is just about points on the face completely misses the way humans 'embody' learning. The idea that a computer can 'read' emotions accurately is nothing but pure speculation and to place critical judgments on such technology is ethically dangerous.

Emotions are nothing like a 'code' and thinking of the human-as-computer just decoding signals completely misses what it is to be human. STEM reductionism supposes that the human sense can be divided and that visual perception can be separated from its embodied state. Heaven's article in SAM demonstrates why such thinking is dangerous. But this has not stopped tech giants from exploiting such a naïve belief and making money. But it is a very dangerous trajectory when peoples lives and jobs are on the line.

The human face that has 43 muscles and the combination of facial affordances is limitless. But to then propose that a combination of facial muscles corresponds to an internal emotion says more about belief than it does about reality. For example, one cannot separate the expression of emotion from other things such a body position, voice, tone of voice, posture, cultural knowledge, breathing, use of hands, pounding heart and skin colour.

The brain is not a computing organ but a resonance organ, it doesn't instruct actions but hosts bodily conversations between the nervous, endocrine and immune systems. Many of the things we learn are embodied in heuristics or gestalts, implicit ways of knowing that are felt not computed. In this way humans perceive things as wholes not as computers do in parts. Feeling knowledge (implicit/tacit knowledge) is the key to interpreting emotions and computers will never have this 'feelings' knowledge.

The STEM belief/faith in facial recognition completely ignores the old aphorism 'you can't judge a book by its cover'. From birth, babies have a heightened sensitivity to the attention of faces it deems for survival. Babies can mimic facial expressions from birth and making such knowledge implicit forms the basis of all social development. Computers have no such need for 'social development' and so cannot implicitly know what a human can know despite feeding millions of facial expressions into the computer.

When the assumptions of STEM-only thinking transfer into applications like hiring and firing people, predictions of risk and other eugenic projections we have entered a brave new world with naïve and dangerous consequences ([https://aeon.co/ideas/algorithms-associating-appearance-and-criminality-have-a-dark-past?utm\\_source=Aeon+Newsletter&utm\\_campaign=f7c118f081-EMAIL\\_CAMPAIGN\\_2020\\_05\\_11\\_01\\_52&utm\\_medium=email&utm\\_term=0\\_411a82e59d-f7c118f081-71232212](https://aeon.co/ideas/algorithms-associating-appearance-and-criminality-have-a-dark-past?utm_source=Aeon+Newsletter&utm_campaign=f7c118f081-EMAIL_CAMPAIGN_2020_05_11_01_52&utm_medium=email&utm_term=0_411a82e59d-f7c118f081-71232212)) in what we think of human affordance.

## Free Intro to SPoR Online - Register for Second Cohort



In the next few weeks the first cohort of people who elected to do the Free Introduction to SPoR Online Module One, will complete their work. The program has been offered for free because of the Covid-19 pandemic and over 90 people signed up to the first cohort.

The program is a 10 week commitment and involves watching videos, keeping a journal, selected readings and a series of Zoom sessions. At the 10 week ending people are awarded a Certificate for Module One An Introduction to the Social Psychology of Risk.

All Modules offered by the Centre for Leadership and Learning in Risk (CLLR) are listed here:

<https://cllr.com.au/product-category/elearning/>

All 21 modules are available for study once the foundational first three modules have been completed. Each module is equivalent to \$3500 of value.

**If you wish to be in the second cohort that will commence study in June, please register your interest here: [admin@cllr.com.au](mailto:admin@cllr.com.au)**

**Please do not register for this course just because its free. If you don't participate in the first participation hurdle you will be cut from the cohort.**

## Free Downloads

Dr Long has now release another book in the series on risk for free download. The most highly successful book **Risk Makes Sense, Human Decision Making and Risk** is now yours for free download. You can get all four books being offered here: <https://www.humandimensions.com/shop/>

### Free Videos and Podcasts

Don't forget you can get free videos and podcasts here:

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including the highly acclaimed series Risky Conversations, The Law Social Psychology and Risk with Greg Smith both as podcast and video series: <https://vimeo.com/showcase/3938199>

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