**GOSSIP POWER AND CULTURE – How society works**

A talk to BRLSI Bath by A C B Wilson, to be given on Feb. 7th, 2017

My talk this evening “Gossip Power and Culture” is about how society works.

I’ll be saying that despite 3,000 years of scholarship we still don’t know.

For example we still can’t explain the hideous brutality of warfare or the corrosive poisons of corporate greed; we simply label them “evil” and sweep them under the carpet. Even though they might well cause our extinction quite soon.

These ugly behaviours can probably never be prevented, but surely we can focus our scholarship on how to understand them better. That’s what I will try to do this evening. It’s surely better to try and understand the Devil and watch what he’s up to than to pretend he isn’t there.

We puzzle endlessly about the great imponderables, like the creation of the universe, the origin of life and the nature of consciousness, but we’ve become quite used to our inability to explain evil. We don’t even *recognise* the fact that we don’t understand how society works.

There has to be something massive preventing us from recognising our own true nature, and I’m going to argue that the problem is hubris or self-importance. Hubris was described by the ancient Greeks as human impertinence towards the Gods.

I’m going to try and persuade you that if we can remove the barrier of hubris we may be able to recognise the difference between the way we *assemble* into working groups, and the way these groups *perform* and interact.

What I’ll be saying may sometimes be unfamiliar, but it’s a simple chain of logic. There is no higher maths or complex biology in it. And we don’t need any ethics or difficult-to-understand philosophy either. Quite the reverse in fact; philosophy is rejected as irrelevant.

I call this set of arguments “Assembly and Performance thinking”. And I will claim that it amounts to a unifying framework or general theory of society.

**BUT FIRST A BIT OF BACKGROUND**

In the year 2000 I went on a bike-ride round the rugged coast of Ireland with my old friend John Gibson. John, a professor of fish ecology in Canada, kept going on about how corporate greed has almost completely destroyed the Irish habitats of the Atlantic Salmon. But my career had been in financial control in big business. My profession was heavily under fire.

While pedalling along this idea emerged. It seemed to answer so many questions that when I got home I set about researching it. I had two questions: Could it be proved wrong? and why hasn’t it been thought of before?

Under Victor Suchar’s fierce eye I gave four exploratory talks on it here at the Bath Royal Literary and Scientific Institute. [“the dual nature of human behaviour” 6/1/04 “nietzsche: right questions, wrong answers” 3/5/05, “consciousness an evolutionary approach” 4/7/06, and “cooperation can kill” 2/12/08.]

Now, today after 17 years the time has come for it to be tidied up and released into the wild. I call the idea Assembly and Performance Thinking.

Here’s a quick sketch

After 3,000 years of deep thought on mountain-tops and scholarly research in universities we still do not know how to explain warfare or corporate greed among other “evils”.

But the giant corporations I worked for certainly were not evil. So realising there must be an answer I went all the way back to the underlying basics of society.

PUT IP SLIDE 1

1 All living creatures from microbes to humans mess about all day long. they metabolise, protect themselves and reproduce. These are the three functions of life which make up the *daily business* of all creatures on earth.

In humans metabolise means eating, breathing, digesting and eliminating waste. In other words acquiring energy,

2 All living creatures use a triangular trial and error control loop to do each of these three things. They act, learn, review and act again.

3 This control loop is mutually trumping like the game scissors, paper and stone.

4 while solitary creatures such as spiders, snakes and bears do *their daily business* alone, cooperators unite to do it: they assemble and divide their labour to perform one or more of these three functions.

And that’s what I mean by going right back to the very basics: to the principles of life which underlie society.

The two words to remember in all this are *Assembly* and *Performance.*

**OK SO FIRST I’LL TALK ABOUT ASSEMBLY**

Before a cooperating unit can perform its task it has to assemble and that’s more difficult than it sounds.

As Darwin pointed out in what he called “the Struggle for Existence” the default condition for all creatures is selfishness. This must be overcome before individuals of *an already cooperative species* can unite effectively.

“Will I join in here or shall I not bother?”

So when they perceive the need, social mammals such as dolphins, hyenas and humans, can switch modes from lone operator to selfless cog in a working unit.

For example in a rowing eight crew-members switch from proud-bodied athlete in trendy sunglasses to selfless crew member ready to die for his mates.

This process of assembling brings a sort of group mind into existence. This acts as a controlling or orchestrating consensus whose purpose is quite simply the need for which the group assembled in the first place.

This quasi-mind is most developed in mammals. Antonio Gramasci, an Italian sociologist writing in the late 1920s said:

‘Every social group, coming into existence on the original terrain of an essential function in the world of economic production, creates together with its self, organically, one or more strata of intellectuals which give it homogeneity and an awareness of its own function not only in the economic but also in the social and political fields.’

This quasi-mind is central in assembly and performance thinking.

Next a word on evolution:

If we can accept that the first life forms were solitaries and that therefore the default condition of all creatures living today is solitary, then the question is how could cooperation ever have been able to evolve despite “natural selfishness”.

Evolution is essentially a weeding process; one in which all living creatures evolve when their ambition is opposed by external attrition, leaving only the fittest to survive.

In this way life evolves to fill the niches available in nature and one of these is cooperation. In other words one’s performance of life’s business can be greatly enhanced if one can cooperate to do it.

As with sight, which uses light waves that existed before life began, and hearing, which uses pre-existing sound waves, cooperation is a *pre-existing* evolutionary niche. Here lie opportunities and evolution by natural selection is highly creative when it comes to exploiting opportunity. Like sight and hearing, cooperation has been evolved separately, many times; there is no common cooperating ancestor.

The slime mold *dyctyostelium discoideum,* a single celled amoeba, is one of the best known of the many social microbes active today, and the Portuguese Man-o-war is another. Individual cells form cooperating colonies in which labour is divided, and amazingly certain members forgo their reproductive opportunities for the good of the colony.

As I’ve said the sole reason why any species is cooperative is to improve its performance of some or all of life’s business: matabolising, self-protection and reproduction.

Slime molds may seem a long way from the question of human warfare and corporate greed, but it is important for the ideas I’m putting forward this evening that significant similarities can be seen in both species. the details are quite different of course but the underlying processes are the same. We are not quite so unique as we like to think.

The basic mechanisms I’ve been describing: the difficulties of assembly, the pursuit of a common purpose, and so on apply to all cooperating creatures from microbes to humans, each metabolising, self-protecting and reproducing in the pattern which best suits its own habitat.

This dizzying array of exquisitely tuned and combined ways to cooperate has been comprehensively surveyed among others by E O Wilson in his book “Sociobiology” (1975). So I will restrict my assembly and performance thinking to mammals and particularly humans. Otherwise I’ll be going on talking till the end of the week

Altruism, the sacrifice of personal advantage for the good of the group is the very essence of cooperation. The enigma is that altruistic individuals should breed less well. Their genes, including those for altruism would thus be weeded out in the species, making it quite impossible for cooperation to evolve. However this ceases to be an enigma if we think of the group rather than the individual as being the unit of selection. if the more cohesive group usually out-competes the less cohesive, then its genes, including those for altruism, will spread through future generations.

But wait: it’s not simply a question of evolving genes for altruism. Simple self-restraint in every transaction would be a fatal handicap in the struggle for existence. Altruism must be discretionary according to circumstances.

Every individual must be able to cooperate or split. “should I cooperate here and risk my life or should I split and so contribute to team failure?”

In mammals this discretion is achieved by the process known as *nature* *with nurture.* Thus a genetically inherited propensity for rules of behaviour, nature, is culturally expressed through nurture.

This cooperate-or-split process is so instinctive that we never give it much thought. But it shows how intricate the principles of cooperation actually are.

It’s like language. We are born with fingers and toes but we are not born speaking Chinese. Instead we are born with the genetic propensity to learn any language. Then we learn the particular language of our tribe as a set of cultural rules, just as we learn to drive on the left, or to use money.

Here’s an illustration: A recent TV documentary on African wild-dogs showed this Nature / Nurture process in full swing. Puppies are born with a predisposition for social discipline. They quickly learn to accept their parents’ rules of behaviour. Then in play and social experiment youngsters try out alternative tactics such as brawling, bullying, boasting, running away, aggression, self-restraint, greed and sharing fairly. They learn about balancing social ambition against personal safety, and cheats and non-conformists get bullied into accepting tribal rules.

In this process youngsters build up their own personal social-response reference libraries, call them “social habits”, which help them to survive and prosper in the rough and tumble of life.

The use of brain-power to keep track of these social dynamics illustrates how a human tribe creates cultural tramlines, maintains them and passes them on to future generations.

As I’ve already said evolution by natural selection is essentially a *weeding process.* Many ambitious aspirants face attritional forces. so that only the ‘fittest’ survive and reproduce. This requires, on the one hand a life form *wanting* to survive and prosper and on the other destructive attritional forces; the weeding agents. This confrontation is the essence of the weeding process

So It’s like the spark in a petrol engine: if there’s no confrontation – there can be no weeding.

The question now arises, at what level of life does natural selection take place? Is it the gene, the individual, the tribal group or the species, or even all four together? As many as nine levels of selection ranging from gene to ecosystem have been proposed.

Many scholars including Steven Pinker, Richard Dawkins, Samir Okasha, and E O Wilson favour multi-level selection in which natural selection operates at several levels at the same time.

I suggest that natural selection cannot happen if there is *no spark* between ambitious life and the forces of attrition. This rules out the gene as a level of selection. Sorry Dawkins but genes are inert. They don’t have ambition so there can be no spark of confrontation. Tissues, organs and species are also ruled out as levels of selection.

If however it can be accepted that not only individuals but also cooperating groups – social units – possess ambition in their quasi-minds then they pass the spark test and qualify as units of selection.

This is a way of demonstrating that only individuals and cooperating groups can be subject to natural selection.

It is only at these two levels that the process of evolution by natural selection, or ambition versus attrition, can spark. And by the way it can occur simultaneously at both levels.

Until it can be explained how cooperation evolved from the default or solitary condition we cannot claim to understand the ‘machinery of society’. So group selection is central here; it explains how cooperation can evolve from a solitary species despite the massive obstacle of natural selfishness.

having considered how individuals of a social species are able to combine into a working unit, the final question is how does this unit go about performing its job and – in humans – how do multiple units combine to create a society

**PERFORMANCE**

So now I come to the central part of assembly and performance thinking – its essence and beating heart. The simple question which applies to all social creatures from microbes to humans, is:

Having assembled into a purposeful working group: a unit. How does this unit perform it’s task? And from there how does human society work?

The simple answer I propose is that the social unit follows exactly the same logical steps as a solitary creature. This view is supported by the fact that in nature there is no clear dividing line in the range between extreme cooperators such as honey-bees, and solitaries such as snakes.

The cooperating unit is motivated to perform the business of life. it prioritises between metabolising, self-protection and breeding. And thus in doing its daily business it follows exactly the same “trial-and-error’ logic as a solitary creature.

But the important thing here is that “trial-and-error” is a seriously misleading phrase. A creature simply trying, erring and trying again is doomed to repeat the same hunting-oscillation mistakes into perpetuity. The process is in fact a three-phase feedback control loop in which the elements are 1 review the situation, 2 act, 3 remember and try again.

Moreover these three elements are mutually trumping as in the game “scissors, paper and stone”.

PUT UP SLIDE 2

Or in the case of human society: “gossip power and culture”.

This triangular mutual-trumping feedback control loop has a pre-existing logic of its own. Only two conditions are necessary for the rule of three: 1 that the three parameters or factors must be selected, and 2 that the order of trumping must be established. Engineers may notice that this is a progressive - not a negative - feedback control loop. I’ll come back to this later if there’s time.

And that’s it. That’s the essence of assembly and performance thinking.

Because of our unique ability to read and write, we humans have added bureaucracy to our range of social skills. This has enabled us to link the performances of our separate social units, our tribes and corporations, into great empires. For example it is said that it was superior bureaucracy that enabled the Roman Empire to overcome the separate celtic tribes of middle Europe.

Bureaucracy enabled by reading and writing then led to the expansion of human societies. This is a classic example of “emergence” in which the interactions of smaller units lead to the emergence of a coherent larger unit.

Thus in the rough-and-tumble of daily life the separate cooperating units: the families, criminal gangs, charities, clubs, businesses, armies, farms, terrorist groups, mustn’t ignore them, and transport systems sort themselves into a more or less harmonious hIerarchy. It “emerges” naturally.

That’s how human society forms and assembly and performance thinking analyses its mechanisms.

It’s not until one has mastered the mechanisms of assembly that one can see that, logically, performance is quite a separate process. Until that distinction is made the different elements of human behaviour are simply too muddled up in philosophical whirlpools and swamps where hubris lurks like crocodiles.

Here in the biology lab we’re trying to study the human as a social animal alongside the termite, hyena and leaf-cutter ant. We’re not doing the human as glorious God-like creature. They do hubris in the ethics department down the corridor.

Some of what I’m saying this evening may at first seem complicated. But it’s actually quite simple. A lot more simple than macro-economic theory for example.

So that’s it. That’s assembly and performance thinking. I’ll outline some things it implies. And I’ll end with some remarks about current scholarship.

**IMPLICATIONS**

OK. Now. Here are some implications of thinking in terms of Assembly and Performance.

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1 Bullying: Tight coordination is essential for group success so the group as a unit applies force to keep individual members in line. Remember we’re talking biology here, not ethics.

Bullying is ugly but it’s natural and essential for teamwork.

Better to recognise the devil than to pretend he isn’t there. That way you can fight him.

2 Morality dazzles us. It is defined here as a language-like nature / nurture propensity to accept tribal rules of self-restraint. It’s counterintuitive.

Other cooperating mammals also have morality but it is absent in bears, snakes and other solitaries.

And, as Machiavelli pointed out, it is a pointless distraction to social groups such as business corporations. Morality only controls personal behaviour *within* groups.

Some suggest that morality is a God-given attribute. But that’s a misleading idea generated by self-importance or hubris. I’ll talk about hubris in a minute.

3 Warfare and corporate greed like bullying are natural behaviour. They illustrate the group mind’s ruthlessness to outsiders. It’s pointless expecting corporations or nations to accept the voice of conscience unless it’s in their interest to do so. Voluntary codes don’t work. So the only effective remedy for corporate greed is the law. And I mean fines that really hurt, and fierce jail sentences.

This is true even of charities. Their purpose is to satisfy a shared sense of empathy, but just like any other cooperating unit a charity will fight tooth and nail to survive.

4 Sex education: These comments on bullying, morality, corporate greed and warfare suggest that assembly and performance thinking is surely a more important subject to be taught at junior school than sex education.

Youngsters deserve to be taught formally how society works. If only we knew!

5 Psychiatry, is defined here as “repairing faults in a youngster’s personal-response reference library”: their personal social habits. These are faults which crept in during adolescence while the library was being compiled, as in the African Wild Dog example. This explanation may help to de-mystify the practice of psychiatry.

Group failure as in sports teams, military units and political parties might also be diagnosed and rectified by using assembly and performance thinking. For example the recent dip in performance of Bath Rugby Club, the “Sam Burgess affair”, seems to have been a perfect example of incompetent assembly.

6 The law could probably be greatly simplified for criminals, police, public and law-makers if it could be separted into law for individual transgressions like murder, deceit and theft. And law for group transgressions like price-fixing, mis-reporting, excessive bonuses, pollution and habitat destruction.

7 The balance of powers in democratic politics is an excellent idea. But the method of checks and balances built into the American and French constitutions among many others doesn’t work very well. Any two of the three powers: legislature, executive and judiciary are supposed to be able to combine to overrule the third when it gets too big for its boots. But in practice the executive often dominates.

Assembly and performance thinking proposes that the three institutions should be:

* gossip meaning public opinion. The media
* power meaning the executive,
* and culture, meaning the cultural tramlines of society. The law for example

These three functions, I sometimes call them review, act and learn, have the major political advantage that they are mutually trumping.

8 Art can be valued according to its contribution to society: Culture or “this is how we do things around here” lays down the tramlines on which society runs. Without the highway code there’d be chaos. But culture can’t stand still. It must keep up with changes in the way we do things.

Art, that’s to say paintings, songs, books, jokes and stories are cultural artefacts. They express the mood of society, voicing its quasi-mind. They convey a sense of community and togetherness.

Art is like the foam that swirls in the bow-wave of an ocean liner, the component bubbles ever drifting back and dissolving in the ship’s wake, but the foam always there; old bubbles perpetually being replaced by new as the ship forges on.

Cultural artefacts are similar, they express the quasi-mind of the group. Those creations which catch the mood, and help to refurbish the tramlines of society, are recognised as the most valuable. And retrospect often adjusts these valuations. There may even be a clue for art collectors here.

9 And finally about God: I already described the group mind or quasi -mind. It comes into being when a mammal group is assembled. It presides over the group, prioritising between feeding, self-protection and breeding and orchestrating its feedback control loop.

Human groups arrange themselves into hierarchies in which bigger and bigger political groupings are amalgamated from family to village, village to local authority and from there on up to kingdom. Each acknowledges the superiority of the one above. At successive levels this quasi-mind is **personified** in its leadership, and decked out with honorific titles, banners and uniforms whose heroic status and splendour rises in ever increasing steps until the invention of God as the highest imaginable, supernatural, social regulator becomes irresistible.

Nations cannot organise themselves without some form of communal ideal, some unifying principle.

This crescendo enthrones God as the symbolic summit of a tribe or nation, and shows that God in whatever guise is indispensible.

In this context it seems unwise to hope that atheism might one day eliminate religion. Mythical revelations of a white, male, bearded, God-on-a-throne wander about in fairy-land, but if atheism successfully denied the symbolic existence of any superhuman authority in whose name we cooperate, it would undermine culture and with weakened culture a group is vulnerable to takeover. The tremendous power of ISIS is a good example here.

So yes, I am playing the natural selection card against atheism here. You can have natural selection or atheism, but you can’t have both.

**CURRENT SCHOLARSHIP**

What I’m saying runs against one or two strands of accepted thought. So I’ll attempt to deal with these next.

The first is about HUBRIS: You must be wondering: if it is possible to understand how society works by recognising the distinction between assembly and performance, then why has this simple device never been thought of before?

I’m suggesting that the massive obstacle here is hubris.

Hubris is the Ancient Greek word for human impertinence towards the gods. Plato’s cosmology is pure hubris and it still lies deep in our folklore.

2,000 years after Plato along came Darwin who banged our heads together pointing out that we are descended from monkeys.

It then gradually became obvious from what he said that the assembly of individual creatures into altruistic members of working teams is a major achievement in evolution. And that it is not confined to humans.

But we are the dominant creature on earth and it’s as though we are still dazzled by the brilliance of our own reflection.

I blame Plato, but it started long before him. Plato built his glorious cosmology on Pythagoras and Parmenides among others.

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Here’s what he said about reality.

1. The real world we can see, feel and hear is messy and changes all the time; this is the inferior world of ‘sensible’ things.
2. There is a superior world of ideas apparent in mathematics and geometry which is eternal; it’s timeless. It pre-exists life.
3. To create an image of the eternal world; one where humans could live, God had to invent time, and time then gave rise to number.
4. This enabled God to copy everything into the inferior world using the ideal forms existing in the superior world. Copying mistakes can sometimes get made, he added in a brilliant get-out clause.

So here we have an intelligent animal, a human, trying to make sense of things that are beyond its intellectual capacity. The inevitable result is that it ends up inventing an all-powerful God in its own image.

Plato’s gloriously homocentric and all-explaining rationalisation said that there exists a higher realm of eternal principles or forms. This then became the basis for Christianity and Islam: the big city-based religions of the Western World. And although much altered and frequently split into schisms, it still underlies Western culture today. Plato’s internally consistent reality-consolidation of contemporary mathematics, theology and folklore was absolutely brilliant.

But there’s not a single shred of empirical evidence for it, and today it is quite obviously nonsense.

Writing in 1821 George Hegel went even further. He said "man is not sharply distinct from God but rises to God over the course of history". There’s hubris for you. In the raw.

I suggest that the astonishing advances in modern science and technology, space exploration, genetics and so on, when coupled with our inherent religiosity, make it difficult not to believe in the Godlike superiority of homo sapiens. And there stands the mountain of hubris built up over the centuries. There, like the mound of Babylon piled up over centuries of human habitation, stands the massive obstacle.

It’s worth saying here that hubris is totally absent in solitaries such as tigers and bears. It is essentially a social attribute; a disease of the group quasi-mind.

So how can we remove it: We need a strong lever to isolate hubris like a rotten tooth and heave it out of the way so that the human animal is no longer seen as the centre of everything.

The distinction between “ thing” and “non-thing” is offered here as a lever: a thought-experiment, for this purpose. ”Things” can be defined to include all that we can see, feel, taste, smell and hear with our senses.

This leaves as “non-things” any object of enquiry which vanishes when the human interpreting intellect is absent. “Non-things” include proofs, explanations and opinions.

Numbers and mathematics are non-things.

The great French sociologist Emile Durkheim, writing in 1895 said ‘a thing is any object of knowledge which is not normally penetrable by the understanding’. In other words Durkheim didn’t want to be messed about by philosophy either.

For example Michelangelo’s statue of David is a non-thing. A wild horse would simply see it as a lump of white stone; it wouldn’t understand it as a piece of art. An art historian on the other hand might need the promptings of child-like common sense to ‘get it’ from the horse’s view; as just a piece of stone. The horses view shuts out philosophical questions about mathematics, aesthetics and art. It also ridicules questions about reality, being, epistemology and so on; such as; is it real or in my head, and is it still there at night when we’re not looking? The horse doesn’t care.

Somehow this reminds me of the Oozlum bird. Wikipedia says:

“The Oozlum bird is a legendary creature found in Australian and British folk tales and legends. Some versions have it that, when startled, the bird will take off and fly around in ever-decreasing circles until it manages to fly up its self, disappearing completely, which adds to its rarity. Other sources state that the bird flies backwards so that it can admire its own beautiful tail feathers or because, while it does not know where it is going, it likes to know where it has been.”

I love that bit about disappearing up its self adding to its rarity.

Being a non-thing the Oozlum bird consumes its self.

When the human is no longer the centre of the universe it becomes easier to disregard those whirlpools of philosophy; to let them disappear up themselves and disappear.

Only then does it become clear that the mechanisms governing group assembly are completely different from those which orchestrate their performance.

**UNIFYING FRAMEWORK**

Now finally, as I said at the beginning, Assembly and Performance Thinking is not a separate piece of research into one aspect of society. It is a Darwinian contribution which sits with all humility in the category of “Unifying Frameworks”. Among the greatest of these are: Buddhism, Hindu, Christianity, Islam, Plato’s republic, various Utopias and science fiction schemes and of course macro-economic theory.

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Here, to make the point, is a selection of some separate pieces of research into the mechanisms of human society. My point is that they are orphans: we still have no unifying framework by which to integrate them. We have no Christmas tree on which to hang our collection of decorations and lights.

Worse: we don’t even seem to be searching for one:

* Language is achieved by genetically inherited propensity plus culturally transmitted rules. This is well accepted.
* Group selection is one way of explaining the dilemma that altruism is evolutionarily stable despite natural selfishness.
* Emergence is a well understood process in which interacting units combine to form a larger one.
* Ethics is the subjective analysis of cooperative self-denial.
* Assembled working groups and crowds have quasi-minds of their own, which are independent of any individual or leader.
* Art is connected to culture but there is little agreement as to how.
* Hamilton’s rule demonstrates the genetic stability of cooperation in the social insects, and by analogy in humans.
* Game theory analyses decision-making in humans.
* Negative feedback control loops have been extensively applied in descriptions of human society.
* Structure versus agency scholarship is a fertile area of study in sociology.

It is tantalising that though every item on this list is in one way or another about cooperation, yet we still have no general principle to integrate them. They are still orphans.

Indeed sociologists today seem to be content with these various stand-alone doctrines. They even seem to have abandoned the hope that a universal framework could ever be discovered. They don’t even seem to be looking for it. For example The New Scientist magazine regularly lists the dozen or so things we still don’t understand: things like:

* The origin of the universe
* Quantum mechanics
* The origin of life
* Consciousness

And so on; these are regularly recurring themes in popular science.

But popular science never seems to wonder about how society works, about how fragile it is becoming, or what the causes of evils such as warfare and corporate greed actually are. And that’s despite the possibility that they could quite easily turn off the lights for a thousand years to come. There is a gaping gap in our scholarship here. We should at least recognise and discuss this gap.

A good start could be to consider how individuals manage to *assemble* into cooperating units and, having done so, how these units *perform* the business of life.

(55 mins. talking time incl. pauses and extemporisations}

**I HAVE LEFT 20 COPIES OF THIS TALK HERE FOR ANYONE WHO WOULD LIKE TO COME AND GET ONE AFTERWARDS**

**PUT SLIDE 2 BACK UP**

**A C B Wilson 24/2/17**