

25th anniversary
annual INCOSE
international symposium
Seattle, WA
July 13 - 16, 2015



One Size fits all?

A model of human growth and its application to systems thinking

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Your Presenters



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An introduction



This
presentation is
an appetiser.
We encourage
you to read the
paper.





Clare Graves



- Mid-twentieth century, Clare W. Graves taught psychology at Union College in Schenectady, New York
- Chris Cowan and Don Beck used it as the basis for their book *Spiral Dynamics: Mastering Values, Leadership, and Change*





8 Levels of the Graves Model



7: Systems Thinkers

5: Achiever

3: Power

1: Survival

8: Global Order

6: Collaborative Development

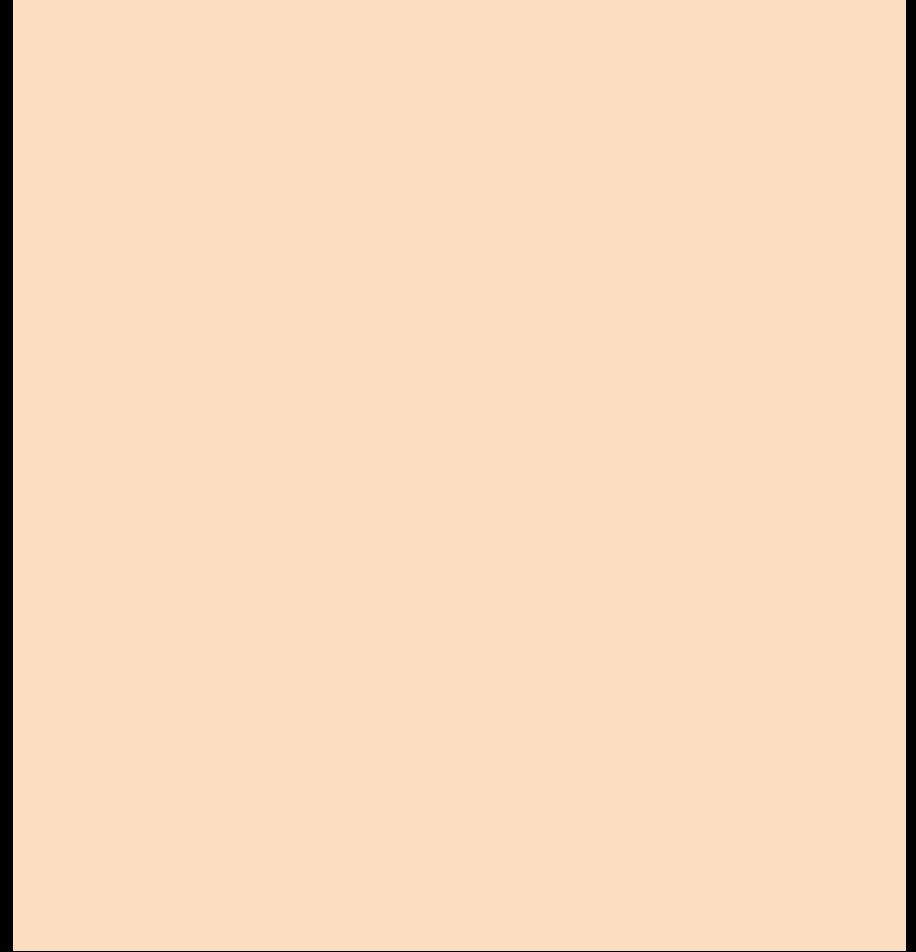
4: Truth

2: Tribal



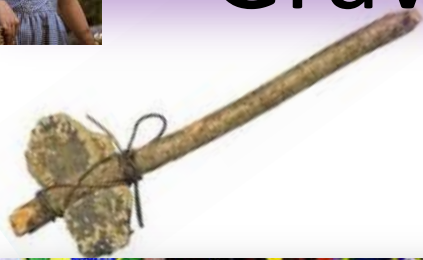


Graves level 1 – Survival





Graves Level 2 – Tribal



- Internal, self-sufficient
- Us versus them mindset
- Low interest to improve



SE View: I'll stay the same and stick with *my* people





Graves Level 3 – Power



Help is for
wimps

This Graves is
all nonsense –
just fix things
now

What big
picture? – my
team and I are
the big picture

Process and is for
those (others) who
don't know what
they are doing – I do

If we do things
my way - we
will be alright

Look – I'm good –
so I can take
more risk than
the weaklings

How does this
help me - now

Strategy is for
wimps

If things go
wrong we'll fix
them then – I'm
good in a crisis

What does the
boss say?



The SE view

- These are the “hero fire fighters”, dictatorial Program Managers
- Not the friends of Systems Engineering
- If they weren't so prevalent and powerful they might be laughable



Graves Level 4 – Truth



- Likes laws, rules, processes, governance, discipline, etc.
- The process does the thinking not the person
- Only one right way to do things – bipolar thinking. Want to eliminate differences - all do the same thing
- Cannot cope easily with ambiguity, uncertainty or risk
- Based on the principle of mistrust. Tends to create micro-managers



SE View: Certification, auditors, reviewers, safety, checklist, six sigma

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Graves Level 5 – Achiever



- Recognize there are many ways to solve a problem
 - Look for strategy, improvement, performance - quality not quantity
 - Extroverts, goal-orientated, risk takers, explorers, adventurers, entrepreneurs, opportunists and politicians
 - Want to control their own success rather than rely on the system
 - Politically savvy, working with the system rather than overthrowing it
 - Law is a rule for fools but a guide for wise men

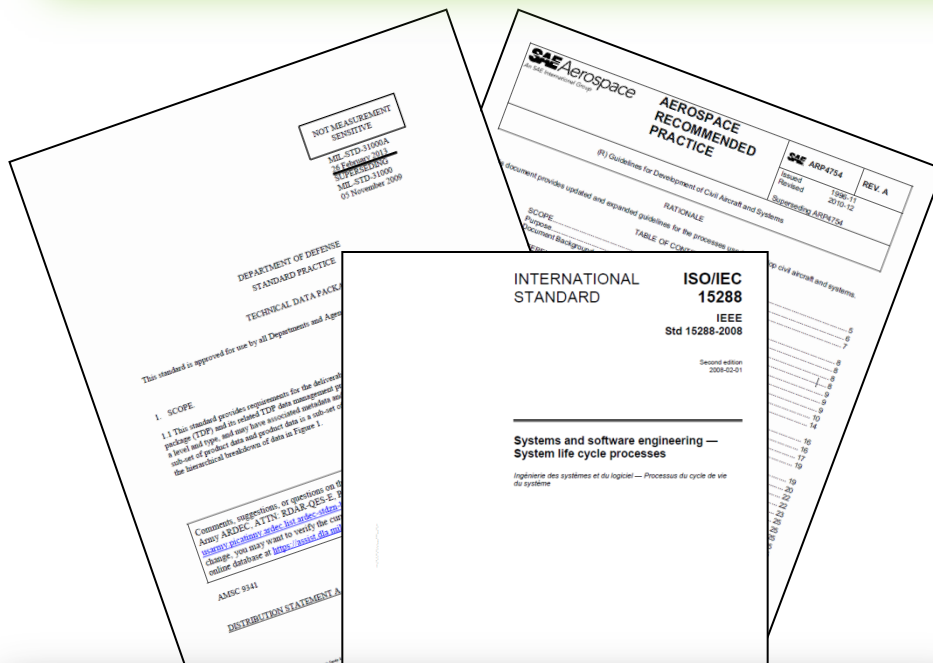


SE View: Copes with ambiguity, pursues success, can cope with complexity





Graves Level 6 – Collaborative Development



- The needs of the many outweigh the needs of the one
- All people have an equal say in decisions
- Coordinators, facilitators and coaches rather than managers
- Collaboration to develop standardized approaches that we can all use
- Collaboration may be more important than results



The SE view

- Good at listening and collaborative working; may take a while to deliver





Graves Level 7 – Systems Thinking



- Knowledge is power
- Seeking knowledge is a lifetime quest
- Respect competence, reject ignorance
- Comfortable with uncertainty



SE View: Often “residential experts”;
best in position where they can share;
thrives on complexity



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Graves Level 8 – Global Order



Imagine all the people
Living life in peace
You may say I'm a dreamer
But I'm not the only one
I hope someday you will join us
And the world will be as one

John Lennon

- It is only by consensus and unity can we fix the world's problems
- There is always a bigger picture
- There really is a better way – together we can find it
- Everything is connected
- Complexity / ambiguity?
Chance for clarification and making things better
- Things really can get better



The SE view

- Do these people actually exist?



Muppets guide to the Graves Model



Increasing Complexity of Problem



7: Systems Thinkers



8: Global Order

5: Achiever



6: Collaborative Development



3: Power



4: Truth

1: Survival



2: Tribal



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A guide to your own Graves level



I'm an 8 (obviously)

3

I'm disappointed you think
I'm only

3

I'm struggling – how can I
use this ?

2 or 4

A check list would help

4

I want more guidance on
this

4

This was boring

Not 7

I'm the next guitar rock god

3

I see how to exploit value
from this

5

Looking forward to orchestra
practice next week

4

Fascinating- but need to
research further

7

I love ambiguity – it's a
rewarding opportunity

At least 5

No time for this

1

I hate ambiguity

2 or 4

You could train people to 5

4

Looking forward to next
standards meeting

6

I could have done a better
job on this paper

3, 5 or 7

I'm proud be a 3

3

OK, but I've got a better
model

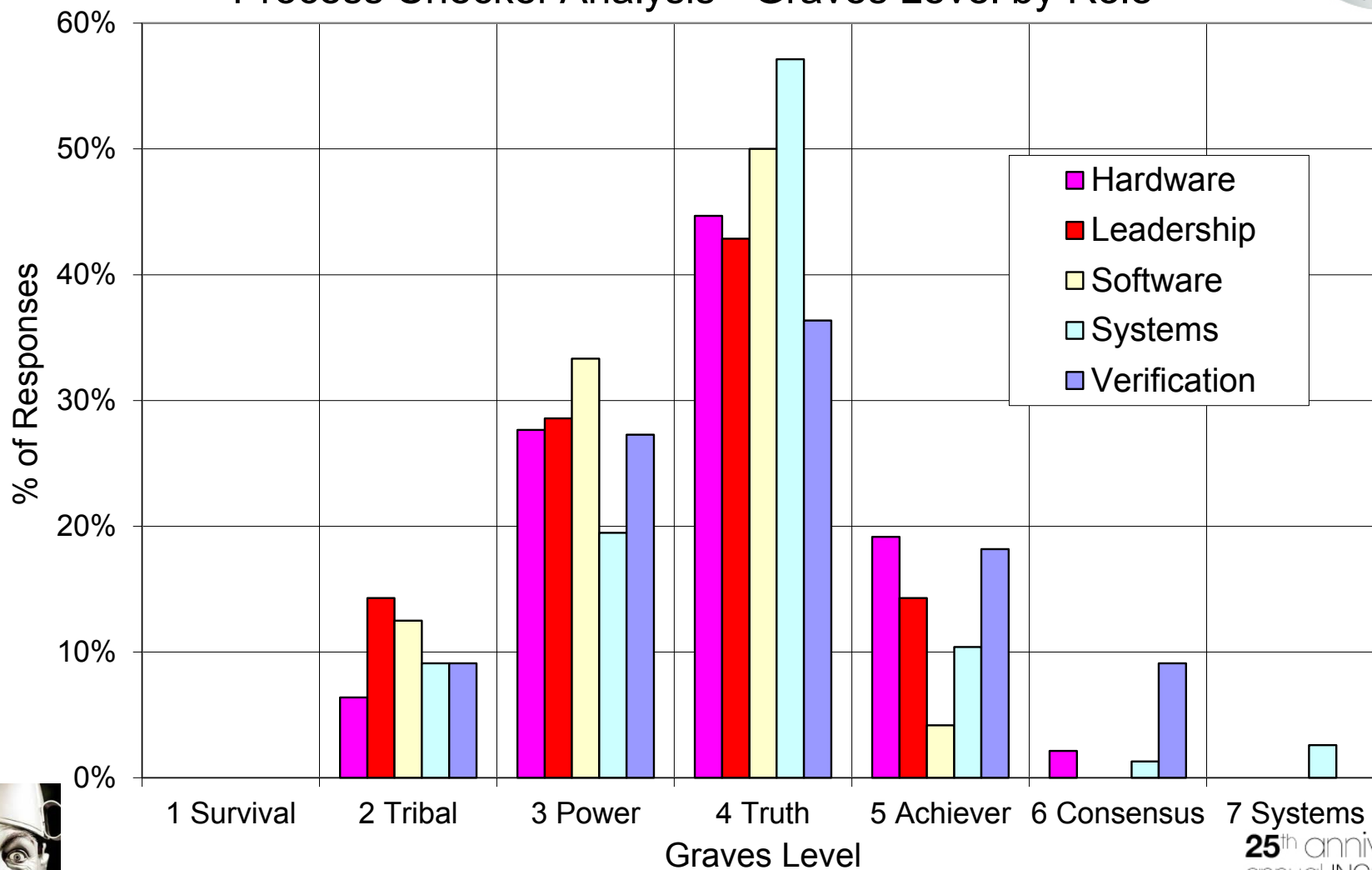
7





Measuring Graves Level Distributions

Process Checker Analysis - Graves Level by Role





5 – 4 interactions



5: Achiever



4: Truth

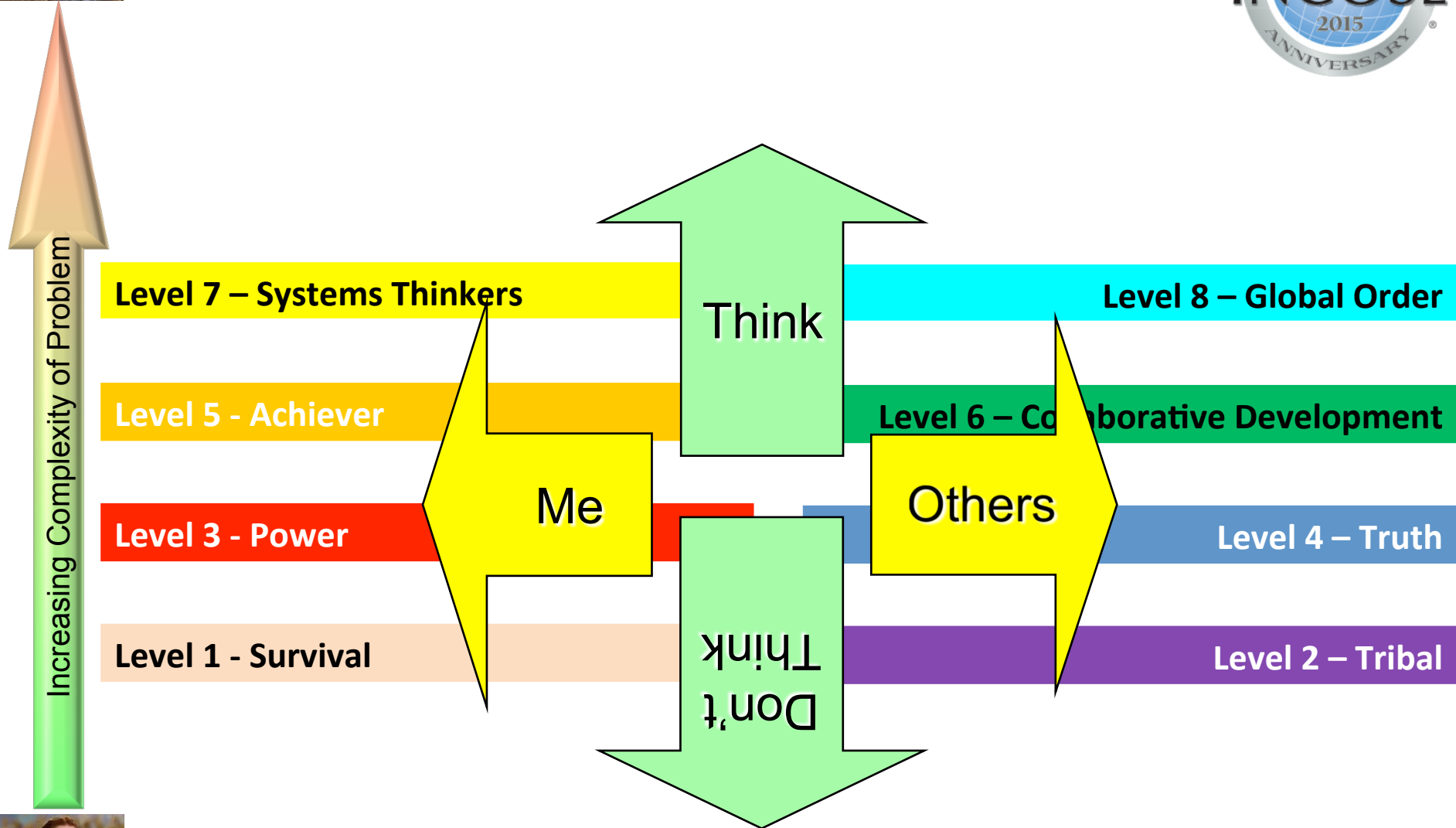


- Maturing a process with a 5 led to problems when used by a 4
- Requirements written by a 5 cannot be implemented by a 4 (or tested)
- 5s will try to improve the world but a 4 will want to keep it the same.
- 5s will understand risk but a 4 will not know how to deal with it
- A 4 will eventually lead a 5 to burnout



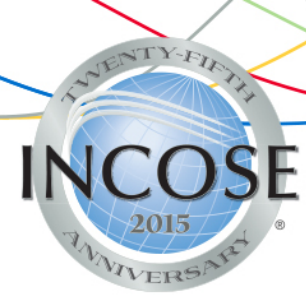


Get the most from the model:





Get the most from the model: Approach the problem



Me

Level 7 – Systems Thinkers	My
Level 5 - Achiever	Mine
Level 3 - Power	Me
Level 1 - Survival	I

Others

Level 8 – Global Order	All
Level 6 – Collaborative Development	Us
Level 4 – Truth	They
Level 2 – Tribal	We

What is best motivation? Internal (odd) or External (even)
Use language “heard” by listeners
Apply an approach that’s possible to implement

Do: Acknowledge tribal groups and mix tribes and leaders to blend new team

Do: Test new tools and processes at the level that will use them

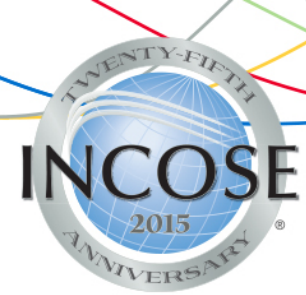
Do not: Expect flexible responses from a team lead by Level 3

Do not: Expect Level 5 metrics and charts to motivate Level 4





Get the most from the model: ID and make changes



- Use most effective communication for level
 - Choose stories that will resonate

For Level 6:

“Your work is important because it brings families together”



- Provide reasoning that will be accepted

For Level 3:



“This change provides new leadership opportunities, continued professional growth, and advancement.”





Summary



- Systems Engineers have to work with, integrate, and persuade others to undertake Systems Engineering
- They need to recognise that “*people are different*” and have empathy with their positions / world views
 - All the levels have value (even the 3s!)
- The Graves model gives Systems Engineers a way to:
 - Understand peoples’ motivation
 - Understand how to communicate with different people
 - Create teams of the right people to match the problem
 - Recruit and develop the right people in the organisation
- The Graves model offers insight into how teams work together and what may effectively motivate and encourage teams at different levels





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Questions



Reminder of the levels

Level 7 – Systems Thinkers

Level 5 - Achiever

Level 3 - Power

Level 1 - Survival

Level 8 – Global Order

Level 6 – Collaborative Development

Level 4 – Truth

Level 2 – Tribal



Use Graves as an SE

1st Define what SEs do:



- Approach problem
 - Understand bias, form approach that is appropriate and feasible
- Influence teams and people
 - Understand motivation and limitations
- Bring people together
 - Know how people work in teams
- Id and make changes
 - Communicate , explain, justify, prove

Get the most from the model



Graves
Level 3

Graves
Level 6