

35 ISMOR: Themes and Trends

A Personal Perspective

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35 ISMOR Themes and Trends

- Themes – there are detectable themes, often viewable from more than than one perspective (e.g. analyst, military, decision maker, historian etc.)
- Trends – always difficult to say if there are trends, but I will offer some observations given I now have 5 years data; comparing ISMOR 31 through to ISMOR 35 (years 2014 to 2018)
- Some additional observations will be offered

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- For the previous three years, by way of an introduction, I have chosen a word that reflects the conference
- Previous selections were “wicked”, “acronyms”, “Lanchester” and I did think that “fake news” or “Brexit” might be a qualifier but have struggled to find a word repeated and repeated. However, I have settled on one that appeals to me!

?

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My choice is : **GLUE**

Acknowledgements to the UK MoD’s Chief Scientific Adviser

A DISCLAIMER - Managing Expectations of my “analysis”

I will not be offering a comprehensive resume of each presentation, each session or even each day’ s efforts

Will not provide a full quantitative analysis of the content of the presentations

My perspective may not fit exactly with your impressions or conclusions (if at all) but, hopefully, it will strike a chord (or two)

As previously, I have assigned 2 to 4 “thematic descriptors” to each presentation or poster and added them up – these are the numbers you will see against the descriptors on the next slide

What I term my “Conventional view”, with the number of primary thematic descriptors encountered shown in parentheses –

- Modelling/Analysis* methods (21) (*of which Wargaming (9)*) -
- Decision support (12) -
- Land Operations (11) -
- Value for Money (7) –
- Air Power & Systems (6) -
- Military Decision making (5) –
- Data evaluation and analysis (5) -
- Procurement (4) –
- Maritime (3) –
- Support to Operations (3) -

What I term my “Conventional view”, with the number of primary thematic descriptors counted across all presentations –

- Modelling/Analysis* methods (21) (*of which Wargaming (9)*) – **rapid methods, better results presentation, data analytics**
- Decision support (12) – **remains a significant effort**
- Land Operations (11) – **rise, will it continue?**
- Value for Money (7) – **budget pressures continue**
- Air Power & Systems (6) – **slight up-tick, but not trend?**
- Military Decision making (5) – **understanding how decisions made still important**
- Data evaluation and analysis (5) – **seemingly on the rise?**
- Procurement (4) – **surprising considering activity in many countries**
- Maritime (3) – **similar to previous years**
- Support to Operations (3) – **low, reflecting operational pressures**

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Title	14	15	16	17	18	Title	14	15	16	17	18
Analysis/Models*	16	26	15	16	21	Weapons	2	2	5	4	0
Decision Support	10	10	17	9	12	Air Power	3	2	4	3	6
Support to Ops	9	5	4	3	3	Maritime	0	5	1	4	3
Capability Reqt's	6	5	6	2	2	Land	2	2	3	6	11
Military Decisions	6	5	4	3	5	Joint(ery)	0	3	1	0	2
Value for Money	5	4	0	6	7	Logistics & Supply Chain	0	3	3	1	2
Analysis for Management	5	0	4	1	0	Procurement	0	3	7	7	4
Data Evaluation	2	2	9	2	5	Cyber	3	1	3	2	0
Risk management				5	2	Lessons Learned	0	3	0	0	0
* Wargaming			2	4	9						

Theme based view (2018) –

- Operational Analysis of the conduct of Military Operations still lower than it was 5 years ago
- On the other hand Support to Military/Defence “decision making” continues to feature highly
- Understanding “soft issues” and “soft OA” has been featured (i.e. behaviours, reasoning, mental models, social impact) but has not featured as highly as last year
- Interest in faster and/or innovative techniques for complex conflicts remains significant, with some examples of progress
- Improving the ease of use & the transparency of analysis (for both analyst and customer) – the need for better communication is recognised, as it was in last 2 years
- Rise of war gaming continues!, Noted last year and obviously a feature this year

Are themes going to be trends? Using the perspective of 5 years it is possible to offer some observations although the “picture” on trends remains somewhat mixed:

- Budgets are still tight (except China, Russia) although NATO nations have agreed to modest increases (“Trump influence” or not?). VfM remains driver for OR
- Data evaluation, especially data analytics, likely to remain a feature. Driven by wider non-defence interest in exploring data?
- Recognition that conflicts are not getting simpler (definite trend, as noted before) and need for OR to examine complexity.
- End of major operations in Middle East (by NATO coalition) has reduced level of direct support to military but not wider decision support
- Tackling the current “problems” continues to elicit use of “older techniques” (re-use) and investment in “new and innovative”

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As in previous years I ask the question - Are these themes and trends relevant?

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My perception is that they are, in large measure, but many conflicts around the world have both kinetic and non-kinetic aspects. OR studies largely focus on kinetic engagements. So I offer a couple of thoughts:

- Need to examine conflict avoidance and/or resolution, perhaps? (I have raised this before)
- Need to apply OR study to immediate post-kinetic phase of conflict? (Very interesting ISMOR sessions led by Chuck Hawkins on North Korea, exploring some of the issues surrounding post kinetic planning and operations)

So, in summary:

- Continuing down – (direct) OR support to military operations,
- Continuing as before – faster, simpler OR techniques, VfM, decision support
- On the rise – data analysis (analytics), wargaming
- But all studies should be not only relevant but demonstrate relevance

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- Courtesy of a data mining algorithm and a hologram!

THANK YOU

**ANY COMMENTS?
OBSERVATIONS?**

Then there are some issues that have arisen, some of which were covered in the Big Debate yesterday:

- Skill set requirements – is a broader set required? Does community have right skill set?
- Is OR relevant? – Questions raised on: visibility to senior leadership: communication of output: and, demonstration of added value of OR to decision maker
- Resources – money and staff (with relevant skills, experience). Is there enough?
- Collaboration and co-operation – need to do more but not always encouraged?
- Data – access, quality and techniques for analysis. Need for further investment?