SUBMISSION OF EVIDENCE BY THE BEHAVIOURAL DYNAMICS INSTITUTE
SEPTEMBER 2013

Prepared by: Tom Wein and Gaby van den Berg

Email: tom.wein@bdinstitute.org

Phone: 0047590206435

Web: www.bdinstitute.org

SECTION 1. EXECUTIVE SUMMARY

1. Soft power can be highly effective – but rarely is. This submission examines the current low level of effectiveness, suggests some common reasons for failure, and then proposes a more rigorous approach, before offering thoughts on high level decision-making and the private sector.

2. Soft power is too focused on communication. Traditional marketing is woefully ineffective within the commercial sector, and worse still in the governmental arena. Military communication efforts provide good examples of the general performance, but rigorous measurement of effectiveness is needed.

3. Other than rigorous evaluation, common flaws in influence efforts include a lack of focus on objectives, poor target audience selection, the pursuit of consistency over targeted messaging, an emphasis on attitudes rather than behaviour and the use of inadequate and inappropriate research.

4. Rather than focusing on bureaucratic structures, we recommend 6 widely applicable principles for a better approach. These will allow the effective and orderly planning of strategic communication campaigns, vastly boosting reliability and reducing waste.

5. Too often, soft power is narrowly conceived, leading to the exclusion of promising potential solutions. The principles outlined above could significantly improve foreign policy decision-making.

6. Specialist expertise is required, and at present, the industry struggles to provide it. More must be done to identify the most effective practitioners.

7. The Behavioural Dynamics Institute is a private, not-for-profit, non-partisan institute that fosters multidisciplinary collaboration to investigate influence and complex human group or societal issues where behaviour change is key. The Influence Advisory Panel (x-iap.com) is an initiative of the BDI. We also assist our commercial partner, SCL, in the design and analysis of field research that directly informs strategic communication efforts by governments.

SECTION 2. INTRODUCTION

8. ***Section summary: Soft power can be highly effective – but rarely is. This submission examines the current low level of effectiveness, suggests some common reasons for failure, and then proposes a more rigorous approach, before offering thoughts on high level decision-making and the private sector.***

9. We contend that soft power can be highly effective – but that it rarely is. We contend that this low return on investment is not limited to government efforts, but is rather a crisis across the whole field of influence, because that field relies on faulty assumptions and a misguided focus on communication, sustained by poor metrics.

10. The ability to persuade foreign actors to 'do what the UK wants' is a critical capability that is fundamental to the country's prosperity. The current low level of effectiveness should be an urgent concern.

11. Current soft power approaches focus too much on communication, and draw principally on marketing theory. This is a mistake: soft power is much wider, encompassing all possible non-violent solutions (including economic power). Indeed, throughout this debate, it should be borne in mind that there is no easy distinction between hard and soft power. Both are merely the exercise of available actions, and good strategy is derived by matching tools to objectives, rather than preselecting tools regardless of aim. Once an objective has been decided, the full range of means should be considered.

12. The next section of this submission provides evidence with regard to the current low level of effectiveness. We then suggest some common reasons for the failure of soft power efforts, and then propose a more rigorous approach. The final sections of this submission briefly explore the role of soft power in high-level decision-making and the ability of the private sector to contribute.

13. These conclusions are derived from a wealth of research conducted and synthesized by the Behavioural Dynamics Institute, including the study of primary research data gathered by our commercial partners SCL in consultancy projects across more than 50 countries. However, where possible we have cited publically available sources.

SECTION 3. CURRENT EFFECTIVENESS

14. ***Section summary: Soft power is too focused on communication. Traditional marketing is woefully ineffective within the commercial sector, and worse still in the governmental arena. Military communication efforts provide good examples of the general performance, but rigorous measurement of effectiveness is needed.***

15. Soft power, as presently construed, is largely an exercise in communication, drawing heavily on marketing theory. Yet traditional marketing is not working, even in the commercial arena for which it was designed.

16. A series of studies by the Fournaise Marketing Group has revealed fundamental lack of satisfaction with marketers' efforts. In a 2013 survey of 1200 senior managers, 78% agreed that advertising and media agencies "are not performance-driven enough and do not focus enough on helping to generate the (real and P&L-quantifiable) business results they expect

their marketing departments to deliver."[1] Research by McKinsey suggests that consumer behaviour is changing in ways which make traditional marketing techniques even less relevant; we contend that they were not especially effective in the first place.[2] The author of one of the key critiques of modern marketing, Greg Stuart, explained "I spent the first decade of my career as an agency media guy….I felt like a charlatan the entire time....I knew in my heart of hearts that we collectively, not just Greg Stuart, did not know what we were doing in spending clients' money."[3]

17. Small wonder then that failure rates are even higher in the governmental arena, for which marketing techniques were not designed. Enormous sums are spent upon government communication, from employing press officers to dropping leaflets on Iraqi civilians to teaching children the Green Cross Code. Yet the effectiveness of all this is in considerable doubt.

18. The military experience in Afghanistan is instructive. A paucity of data means that it is not possible to directly analyze results for the UK military, but US efforts have been relatively well analyzed, and are comparable. In 2003, the Department of Defense's 'Information Operations Roadmap' concluded that "Currently, however, our PSYOP campaigns are often reactive and not well organized for maximum impact."[4] Little has changed, and similar conclusions still appear in reviews of the effectiveness of US soft power deployment. Christopher Paul, in his review, noted that "Countless studies, articles, and opinion pieces have announced that US strategic communication and public diplomacy are in crisis and inadequate to meet current demand."[5] Arturo Munoz identified nine principal messaging themes used by US forces in Afghanistan. Of those, he rated three as 'effective' between 2001-2005; after 2005 he identified no US message whose effectiveness was more than 'mixed'.[6] Much of the communication effort has wrongly focused on changing Afghan attitudes rather than behaviour; it is therefore chastening to discover that even those attitudes have been moving in the wrong direction: in one annual poll, the proportion of Afghans awarding positive ratings to US work in Afghanistan fell from 68% in 2005 to 32% in 2010.[7]

19. One should not conclude from this that effective military influence is impossible. There are examples of success. Christopher Lamb has identified two communications operations which resulted in direct and immediate behavioural change: a leaflet drop and broadcast effort at the start of the war in Afghanistan which led to the surrender of 1000 Taliban fighters in Kunduz Province, and the promotion of a weapons buy-back scheme in Iraq in

---

[1] '78% of CEOs Say Ad & Media Agencies Are Not Performance-Driven Enough', FournaiseTrack, 11 July 2013, http://www.fournaisegroup.com/Ad-Media-Agency-Performance.asp

[2] Court, David et al, 'The consumer decision journey', McKinsey Quarterly, June 2009, http://www.mckinsey.com/insights/marketing_sales/the_consumer_decision_journey

[3] Neff, Jack, 'New Book Reports 37% of All Advertising Is Wasted', Advertising Age, 8 August 2006, http://adage.com/article/news/book-reports-37-advertising-wasted/110937/ The book is Briggs, Rex & Stuart, Greg, 'What Sticks: Why Most Advertising Fails and How to Guarantee Yours Succeeds', Kaplan Business, 2006

[4] US Department of Defense, 'Information Operations Roadmap', 30 October 2003, p. 6.

[5] Paul, Christopher, 'Whither Strategic Communication? A Survey of Current Proposals and Recommendations', RAND, 2009, p.1, http://www.rand.org/content/dam/rand/pubs/occasional_papers/2009/RAND_OP250.pdf

[6] Munoz, Arturo, 'U.S. Military Information Operations in Afghanistan: Effectiveness of Psychological Operations 2001–2010', RAND, 2012, p. xviii The BDI takes issue with several points of Munoz's analysis and recommendations, but his overall assessment of effectiveness is valuable.

[7] 'Afghanistan Poll Charts: Where Things Stand', ABC News, BBC, ARD & The Washington Post, 2010, http://abcnews.go.com/Politics/Afghanistan/slideshow/afghanistan-poll-charts-things-stand-12294783 There are significant problems with polling in warzones, and any purely quantitative result should be viewed with considerable suspicion. However, this finding accords with other research, including that conducted by our commercial partners SCL, and the overall trend is illustrative.

2004, which achieved impressive results.[8] Causation is always difficult to establish, but there is no doubt that there are many more such case studies out there. The task is not impossible, and if done better, soft power efforts could be vastly more effective.

20. As more data becomes available, a similar story is likely to emerge in analyzing civilian governmental communication efforts. The Government Communications Plan notes that there are 1,910 specialist communicators across government, plus another 1,394 in state-funded 'arms-length bodies and non-ministerial organisations', together spending at least £237m.[9] As well as their day-to-day work, the plan provides an incomplete list of 46 specific communication campaigns that the government will undertake. That figure is certainly an undercount.

21. Some of these campaigns will be effective; some will not. We noted above that data on British military communication efforts was lacking. The same is broadly true of civilian efforts. Rigorous evaluation is rare. The House of Lords Science and Technology Committee published a report in 2011 on behaviour change; they found that "A common concern raised by witnesses was the need for greater consistency in the quality of evaluation of government behaviour change interventions, with many suggesting that this was a significant area of weakness."[10] Measuring effectiveness in communication is extremely difficult, but it is too important to ignore.

22. There is a lack of expertise in evaluations and a lack of patience or funding to conduct them. Perhaps above all, there is a depressingly common tendency to conflate process with outcomes. Some particularly unfortunate examples were observed in the evidence of effectiveness presented for FCO public diplomacy efforts around the Olympics. A DVD was produced for South African audiences about the London Olympics: as evidence for the campaign's success, the British High Commission cited the following: "The media coverage produced a solid impression of a modern dynamic Olympic event. All of the TV coverage used footage from the DVD. The Mayor of London and swimmer Natalie Du Toit were interviewed in front of the DVD branding."[11]

23. More positive examples exist. The THINK! campaign on road safety is frequently cited as one of the most effective government communication campaigns. The claim may be true. It is certainly one of the most rigorously evidenced campaigns. Over the past 5 years, an impressive body of behaviourally-focused research has been built up.[12] In this it is an example worth emulating.

24. Though more evidence is needed, and rigorous evaluation is urgent, we assess that many communication campaigns fail, but that some succeed. A central concern must therefore be boosting reliability. In the following sections, we examine the common reasons for failure, and propose a more effective approach to soft power and influence.

---

[8] Lamb, Christopher, 'Review of Psychological Operations Lessons Learned from Recent Operational Experience', National Defense University, 2005, p.58, https://www.fas.org/irp/eprint/lamb.pdf

[9] 'Government Communications Plan 2013/14', HMSO, 2013, p.7 & p.14, https://gcn.civilservice.gov.uk/wp-content/uploads/2013/06/GovernmentCommunicationsPlan201314.pdf

[10] House of Lords Science & Technology Committee, 'Science and Technology Committee - Second Report: Behaviour Change', HMSO, 2011, paragraph 6.1, http://www.publications.parliament.uk/pa/ld201012/ldselect/ldsctech/179/17909.htm

[11] House of Commons Foreign Affairs Committee, 'FCO Public Diplomacy: The Olympic and Paralympic Games 2012', 6 February 2011, Annex E, Ev.28, http://www.publications.parliament.uk/pa/cm201011/cmselect/cmfaff/581/581.pdf

[12] 'THINK! research', 6 June 2013, https://www.gov.uk/government/publications/think-research

SECTION 4. REASONS FOR FAILURE

25. ***Section summary: Other than rigorous evaluation, common flaws in influence efforts include a lack of focus on objectives, poor target audience selection, the pursuit of consistency over targeted messaging, an emphasis on attitudes rather than behaviour and the use of inadequate and inappropriate research.***

26. As previously mentioned, the most common failure of campaigns is the lack of an ongoing process of rigorous evaluation of effectiveness. However, certain other errors recur in soft power and influence campaigns, leading to their failure. This section outlines some of them, and cites examples of recent UK campaigns that have made these errors.

27. One especially common flaw is a **lack of focus on objectives**. Campaigns are frequently tied to fuzzy objectives, with little explanation of how the campaign is likely to achieve the stated objective, little effort to demonstrate why a particular campaign is the best means to achieve that objective,[13] and little focus on what concrete difference it would make to the public, or to HMG stakeholders, if the aim were achieved.

28. One small intervention in Palestine serves as an example. The post provided funding and support to a female car racing team. The intervention aimed to achieve the following: 'challenge negative perceptions about the UK in Palestine; present the UK as socially inclusive, open and collaborative; capitalise on improved perceptions of the UK brought about by our support for the Speed Sisters project to re-frame policy conversations and enhance the UK's reputation; support objective 1 of the Occupied Palestinian Territories country business plan – specifically to 'Implement an engagement and communication strategy that enhances the UK and international community's reputation as honest brokers'; Support wider campaigning for MENA Partners for Progress.'[14]

29. This is not a focused campaign; it is a nice idea supported by a pick and mix of worthy sounding objectives, with the clear implication that the idea preceded the objectives. That does not mean it is a bad initiative. It may have done a lot of good. But it seems unlikely that it could achieve all of the objectives listed above, and in austere times, greater focus is needed.

30. That same example also illustrates another common flaw: it picks a **vague target audience**. To take the target audience first, the stated audience was "young Arabs particularly those involved in rally driving and motor sports and Arab women."[15] These are broad categories: young Arabs and female Arabs encompass an enormous range of lives, and there is little reason to believe that the same communication campaign would persuade such a diverse group.[16] The unfairness of picking the Speed Sisters campaign should be recorded: it is only one example among many, and not a particularly extreme example at that.

31. A related error is to put **consistency above targeted messaging**. The GREAT Britain campaign is a major UK Government effort that falls into this trap. It hopes to reach "nearly

---

[13] A particular concern is the frequency with which communication campaigns are selected, without rigorous thinking about the full range of options available to the government from the varied 'soft power' (and indeed from the hard power) toolbox.

[14] House of Commons Foreign Affairs Committee, 'FCO Public Diplomacy: The Olympic and Paralympic Games 2012', 6 February 2011, Annex E, Ev.28, http://www.publications.parliament.uk/pa/cm201011/cmselect/cmfaff/581/581.pdf

[15] House of Commons Foreign Affairs Committee, 'FCO Public Diplomacy: The Olympic and Paralympic Games 2012', 6 February 2011, Annex E, Ev.28, http://www.publications.parliament.uk/pa/cm201011/cmselect/cmfaff/581/581.pdf

[16] Regier, Terry & Ali Khalidi, Muhammad, 'The Arab Street: Tracking a Political Metaphor', Middle East Journal, Volume 63, No.1, 2009

90 million people across the 14 cities in our nine target markets", communicating about 11 different subjects.[17] A prospective tourist in Delhi will not be persuaded by the same messaging as a businessman in Berlin, and thus the pursuit of consistency has weakened the effectiveness of the campaign.

32. It is moreover often assumed by influence plans, but not demonstrated with reference to research, that the selected target audiences are **sufficiently salient to the stated objectives and sufficiently influenceable**; i.e. that they can be persuaded to change their behaviour, and that if they did so the objectives would be achieved.

33. Perhaps the most common failure of all is the targeting of **attitudes, rather than behaviour**. It is a central assertion of traditional marketing that if you change attitudes, real world behavioural change will follow. The reliability of that assertion has been repeatedly and comprehensively debunked in everything from hotel admissions to happiness.[18] Attitudes sometimes precede behaviour, but often do not. Since it is the behavioural change that is ultimately wanted, that is what must be researched. Very often, simplistic views of attitudes lead to a misunderstanding of likely behaviour. Research in Saudi Arabia has repeatedly demonstrated the clear divide between enthusiasm for Hollywood and distaste for US support of Israel, while in China, young people dislike US support for Taiwan – but still fight to study at its colleges.

34. Another exceptionally common error is designing campaigns based on **inadequate or inappropriate research**. Too often campaigns are based on a bright idea, perhaps discussed with a few experts, rather than rigorous research with the target audience. When evidence is used, it is often a simple polling result suggesting the area in which the problem lies: that is inadequate, given how many decisions must be made on any campaign. Returning to the Fournaise research cited earlier, 72% of surveyed CEOs agreed that "they soon realised Ad & Media Agencies were not as data- and science-driven as they had expected, relied too much on gut-feelings, hearsay, wrong methodologies and questionable information."[19] Very often, the necessary research will not be purely quantitative; numbers can be misleading, and qualitative research has considerable strengths in this field.[20] It is not worth picking out particular UK soft power campaigns in this regard; almost none meet this test. Creativity is a poor substitute for evidence.

35. These common flaws are visible across commercial and governmental influence campaigns. They are responsible for enormous waste of money and time. Below, we outline a better approach.

---

[17]   GREAT   Britain,   'Frequently   Asked   Questions   &   Answers', http://www.greatbrandlibrary.co.uk/index.faq.php

[18] LaPiere, R.T., 'Attitudes vs Actions', Social Forces, 13, 1934, pp.230-237; Kleinke, C.L., Peterson, T.R., & Rutledge, T.R., 'Effects of self-generated facial expressions on mood', Journal of Personality and Social Psychology, 74, 1998, pp.272-279; Cooper, J., 'Cognitive dissonance: Fifty years of a classic theory', Sage, 2007.

[19] '78% of CEOs Say Ad & Media Agencies Are Not Performance-Driven Enough', FournaiseTrack, 11 July 2013, http://www.fournaisegroup.com/Ad-Media-Agency-Performance.asp

[20] For more on selecting research methods for influence, see the forthcoming paper 'Van den Berg, G., and Wein, T., 'Three Crucial Questions about Target Audience Analysis', The Behavioural Dynamics Institute.

SECTION 5. A BETTER APPROACH

36. ***Section summary: Rather than focusing on bureaucratic structures, we recommend 6 widely applicable principles for a better approach. These will allow the effective and orderly planning of strategic communication campaigns, vastly boosting reliability and reducing waste.***

37. Christopher Paul summarizes beautifully the way in which bland and impractical recommendations recur. He counts nine separate reports of US strategic communications that call for 'leadership'. It would be hard to disagree. 20 studies, by Paul's count, called for increased resources, an unlikely prospect at present, and 19 called for better coordination, another point from which few would dissent.[21] Rather than getting bogged down in arguments over bureaucratic structures or funding levels, we propose six principles which can be applied to soft power and influence efforts at all levels and across all departments.[22]

38. **Principle 1: Effective influence attempts to alter behaviour, not simply attitudes.** Influence should attempt to achieve a specific, measurable and unambiguous behavioural objective. Campaigns aimed at creating and increasing Afghans' positive attitudes towards ISAF, for example, were implicitly aimed at stopping a whole host of non-desired behaviours, from fighting to donating money to growing poppies. Yet SCL research which looked at one such behaviour in isolation – the planting of IEDs – uncovered that the reason for this behaviour had nothing to do with 'liking' or 'disliking' ISAF soldiers. Fieldwork uncovered that many young Afghans in fact dreamt of going to the United States, and planting IEDs was one of the few activities that paid enough money to allow them to save up for their ambitions.

39. **Principle 2: Influence is most efficient and effective when it targets self-identifying social groups, because behaviours (and attitudes) are determined by the social context.** Cultural diplomacy directed at Chinese people is likely to fail, and so too is cultural diplomacy directed at Chinese males aged 18-32, because that is an externally-imposed demographic category, not a self-identifying, cohesive group. Far more useful is cultural diplomacy aimed at Netizens, because they have a shared culture.

40. **Principle 3: Influence efforts must be attuned to local culture and circumstance to have any chance of success.** Conclusions must be 'audience-centric'; they must adopt the perspective of the target audience. The best way to do this is through rigorous social science research. Three white British bureaucrats in a London office will not come up with an effective way of persuading Indians to buy British products. Asking a few British citizens of Indian origin for their opinions is little better. Qualitative and quantitative research designed by influence specialists and conducted by Indians in India is far more likely to generate effective cultural diplomacy strategies.

41. **Principle 4: Some pieces of cultural knowledge (for instance, motivations) are far more valuable than others, because they are diagnostic.** That is, they help eliminate a great many possible hypotheses and approaches, meaning that you reach the correct solution more quickly. For instance, if the paramount aspiration among Rwandans is to own a house, then cultural diplomacy efforts focused on the success of UN efforts to help people

---

[21] Paul, Christopher, 'Whither Strategic Communication? A Survey of Current Proposals and Recommendations', RAND, 2009, p.1, http://www.rand.org/content/dam/rand/pubs/occasional_papers/2009/RAND_OP250.pdf

[22] These proposals were originally developed by Dr. Lee Rowland, and may be described as 'the BDI approach'.

buy a car or start a business will just be ignored. Therefore, by finding out one piece of information, two potential campaigns can be eliminated, or reshaped (starting a business can be sold to Rwandans as being the fastest way to homeownership, or mortgage loans for business owners can be made vastly more attractive and achievable). The BDI measures a bank of research parameters drawn from social psychology and related disciplines; these have proven far more effective than seeking a general cultural understanding.[23]

42. **Principle 5: A holistic understanding of a problem can often yield counter-intuitive but more effective solutions.** This means that quantitative research is not always the most useful technique. Though it can provide hard numbers that are simple to understand, it should be preceded by semi-structured qualitative research that allows for a full investigation of the social group at hand.

43. **Principle 6: Influence efforts without data-driven and audience-centric measures of effectiveness are a waste.** Situations change, and after a few years, even the best cultural diplomacy effort may stop having an effect. Measuring effectiveness regularly means that you know when this has happened, and can make adjustments accordingly. Vitally, you must measure effectiveness – not just how many hours of programming you broadcast into Myanmar, or how many people listened to it (which are in fact measures of action and measures of performance), but how many people changed their behaviour accordingly.

44. In general, a soft power effort should proceed in the following manner: an overall aim is determined, and this is distilled into specific behavioural objectives, perhaps supported by initial primary and secondary research. For each objective, the most salient and measurable self-identifying and cohesive target audience is selected, and primary research is conducted upon that group. This research will be in-depth and multi-stage, and will test a range of research parameters. Meanwhile, a baseline will be established to determine the effectiveness of the campaign. Analysis of the wealth of data thereby produced will allow the design of specific, fully articulated and actionable recommendations, which may or may not be communications-focused. The campaign will then be conducted, and its effectiveness is then measured.

SECTION 6. A NOTE ON STRATEGIC DECISION MAKING

45. *Section summary: Too often, soft power is narrowly conceived, leading to the exclusion of promising potential solutions. The principles outlined above could significantly improve foreign policy decision-making.*

46. At the beginning of this submission, we stressed that when exercising power to achieve an objective, all possible tools should be methodically considered. Too often decisions which are fundamentally operational – decisions on the means to be used – are made at the same time as decisions on the objectives to be pursued.

47. The approach we have outlined, from concrete objectives to measures of effectiveness, via evidence-led strategy, is applicable well beyond communications. We believe it has considerable potential as a decision-making tool at the highest levels of government.

---

[23] *For more on these research parameters, refer to Rowland, Lee & van den Berg, Gaby, 'In Pursuit of a Contextual Diagnostic Approach to Behaviour Change', Behavioural Dynamics Institute, September 2012, http://www.bdinstitute.org/wp-content/uploads/2012/10/LeeGaby.pdf and Wein, Tom, 'The Perfect and the Possible: Seeking a Frugal Model of Behavioural Change', Behavioural Dynamics Institute, October 2012, http://www.bdinstitute.org/wp-content/uploads/2012/10/PerfectPossible.pdf*

48. Most – perhaps all – foreign policy actions aim to influence a group or individual to act in a certain way (even the most brutal wars aim for surrender rather than annihilation). Adopting the principles described above would provide a structured thinking process that insisted on consistent reference to the evidence, thereby improving foreign policy decision making in general.

49. While ministers have an absolute right to involve themselves in all details of the organizations they head, they would likely achieve better results, in soft power and elsewhere, if they adopted a 'mission command plus approval' approach, in which they granted more room to those with a detailed understanding of the evidence to determine the best course of action, within the parameters they set.

SECTION 7. A NOTE ON INDUSTRY

50. ***Section summary: Specialist expertise is required, and at present, the industry struggles to provide it. More must be done to identify the most effective practitioners.***

51. In conclusion, it should be noted that effective soft power is a challenging, technical discipline, requiring a detailed understanding of research methods and the findings of social psychology, as well as considerable flexibility to achieve results in challenging environments. Specialist expertise will therefore often be required. In the long run, the Government may wish to consider bringing this expertise 'in house', as they have done with IT. In the meantime, however, much communications and soft power work will continue to be outsourced.

52. It should therefore be borne in mind that many so-called communication specialists in the private sector also lack this expertise, and make many of the same errors as those outlined above. It can be exceptionally difficult to differentiate between the genuine article and opportunistic bluffers. The BDI consequently recommends the development of rigorous standards of communications procurement and accreditation which focus on the issues and errors identified above.[24]

---

[24] *For more on telling apart good contractors and bad ones, see the forthcoming paper 'Van den Berg, G., and Wein, T., 'Three Crucial Questions about Target Audience Analysis', The Behavioural Dynamics Institute.*