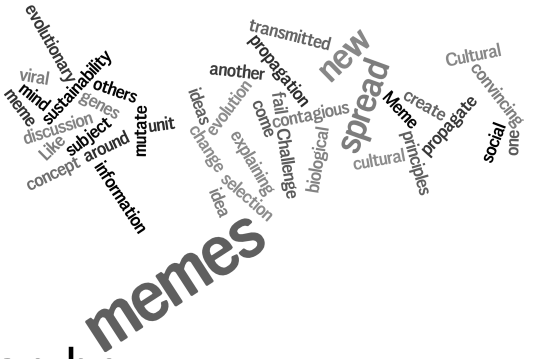
“Doing” Culture – MEMETIC ENGINEERING

Idea Flash

Heinz Gutscher, chair ProClim

Swiss Global Change Day, 2 April 2014, Bern

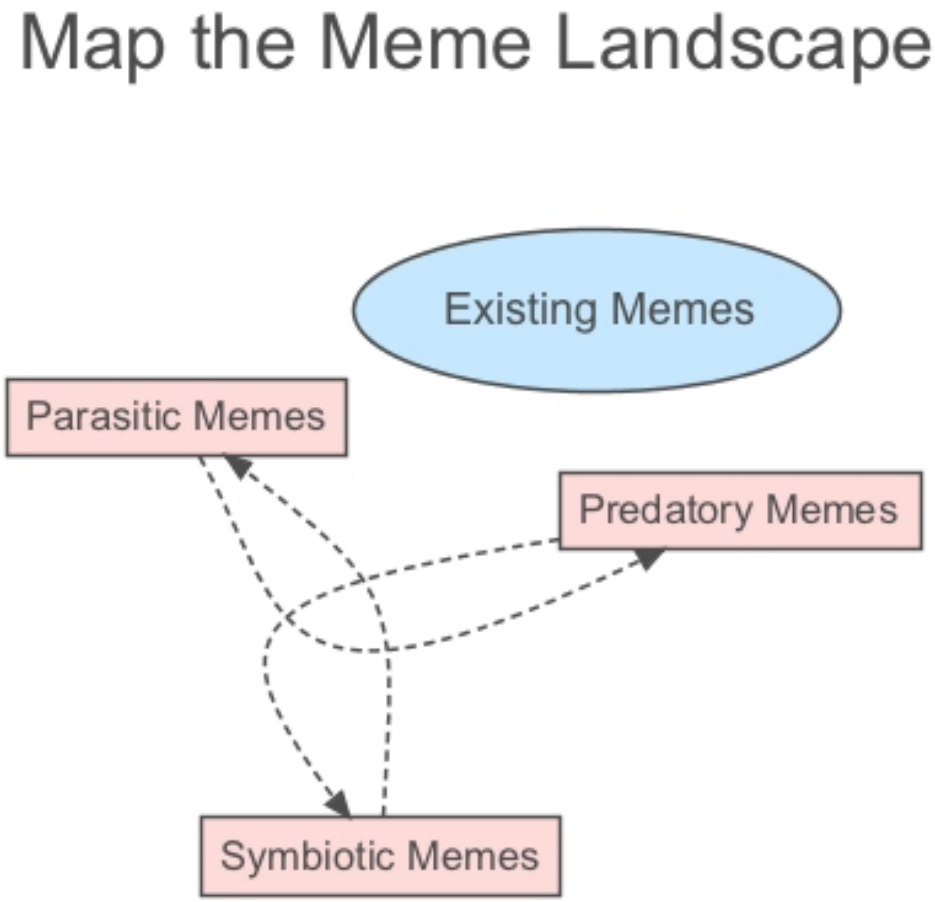
What is a meme?



- A meme is an idea, a unit of social information which can be transmitted from one mind to another.
- “Meme“ is a concept for discussion of evolutionary principles in explaining cultural evolution and the spread of ideas.
- Like (biological) genes, memes are subject to selection.
- Some memes fail to propagate, others spread or mutate.

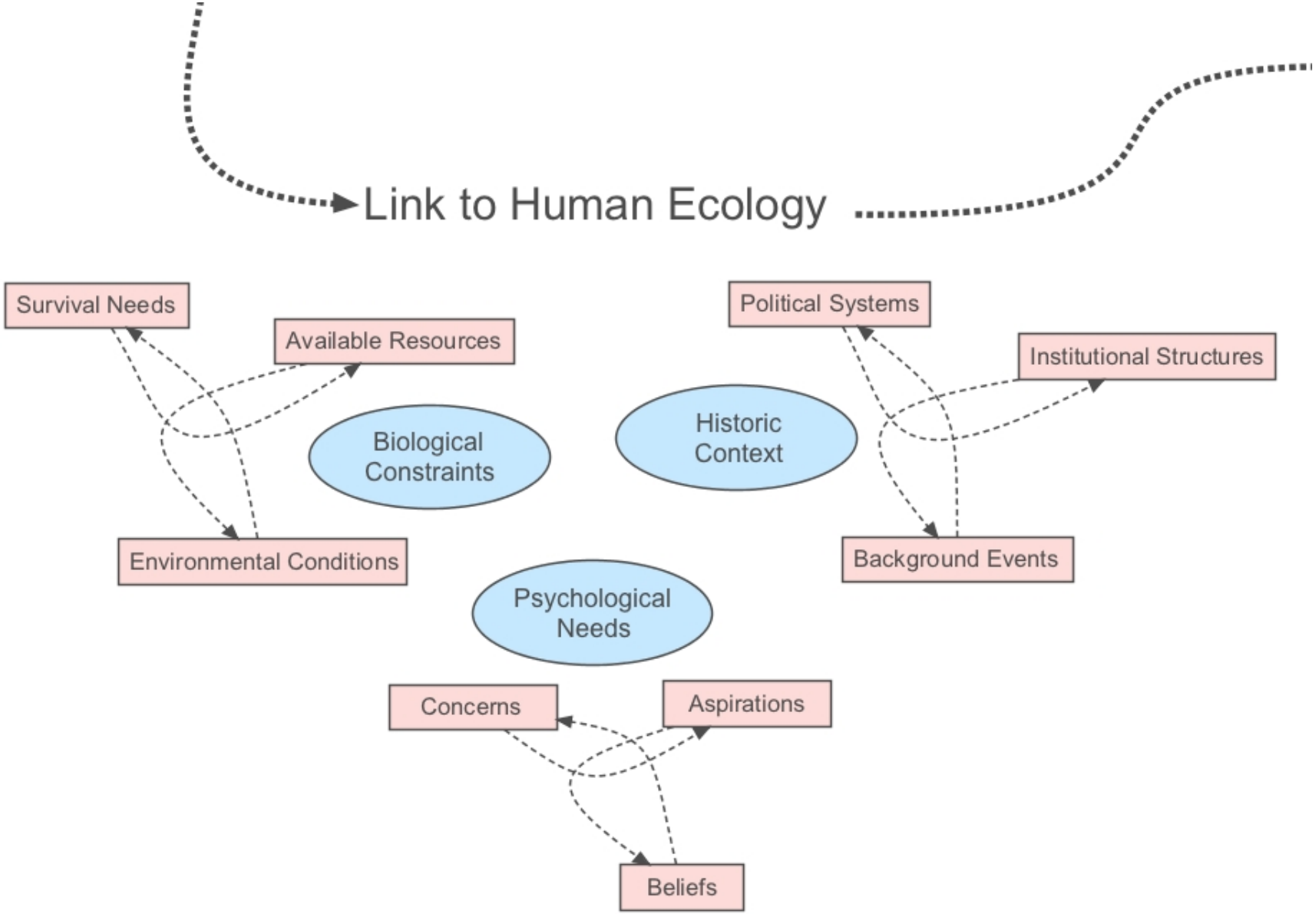
- Cultural change will come through propagation of new, convincing and contagious memes.
- Challenge: How to create new, “viral” memes around “sustainability” or “sufficiency”

Framework for changing culture with memes (1)



http://www.climatememe.org/2013/01/25/how-to-change-the-world/

Framework for changing culture with memes (2)



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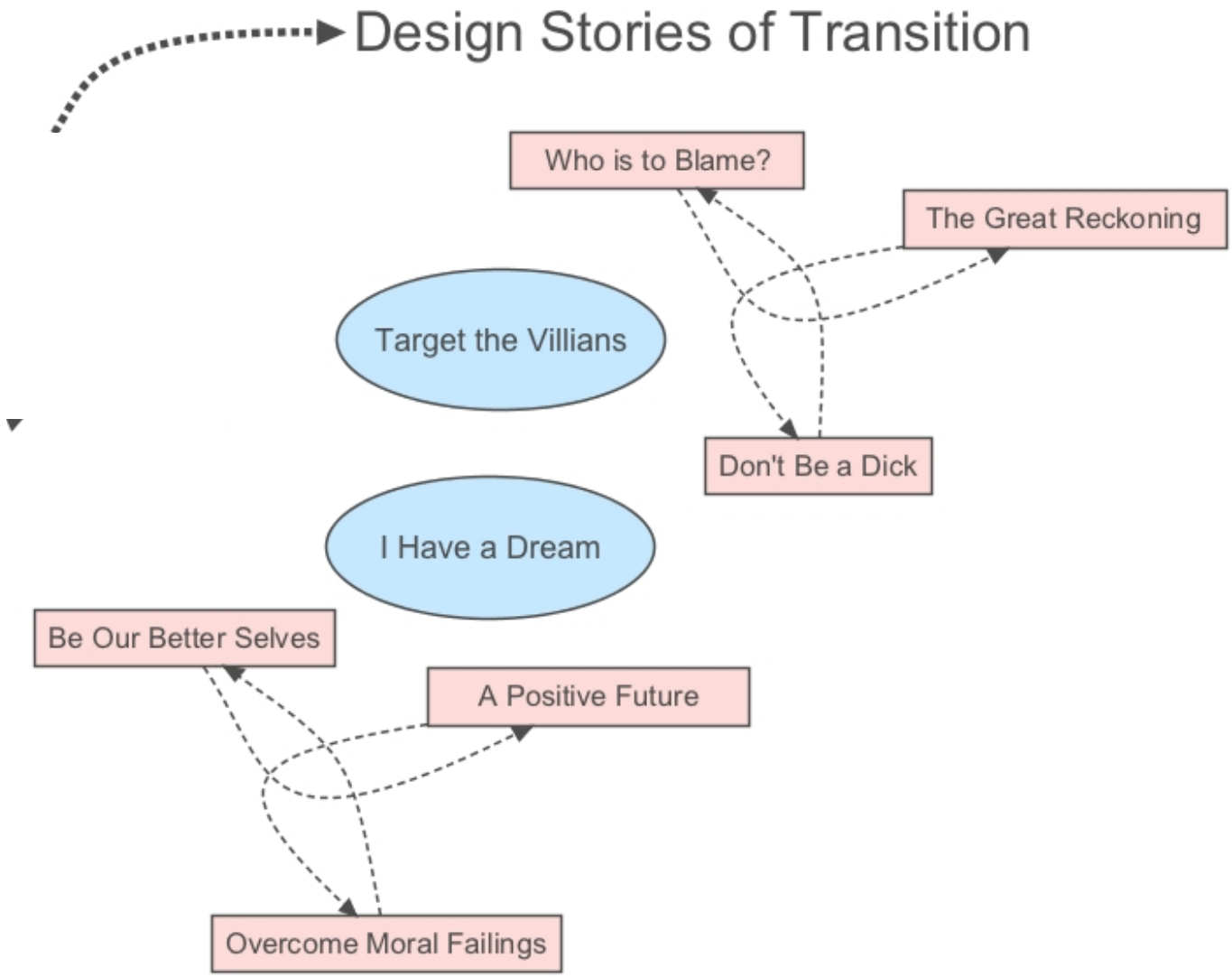
Framework for changing culture with memes (3)



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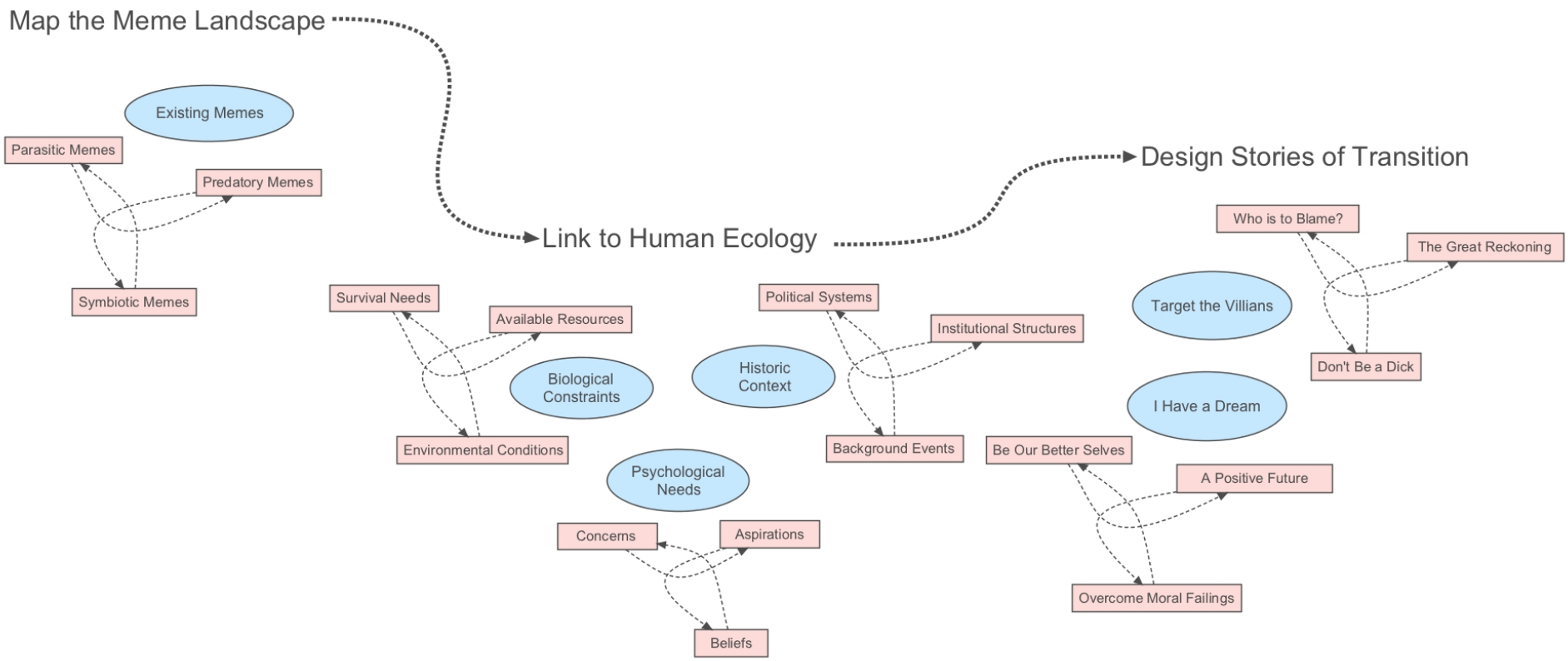
Framework for changing culture with memes (4)



http://www.climatememe.org/2013/01/25/how-to-change-the-world/

How do we learn from each other? Memetics as a new view of human nature

S. ANTHONY BARNETT
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Since 1859 influential attempts have been made to fit the peculiarities of the human species into a 'Da frame. The most prominent have portrayed a human nature fixed by naturally selected genes. A more alternative system is based on units called 'memes', analogous to genes. Memes include concepts and practi are described as moving directly from mind to mind, as a result of imitation. They are also said to be sel reproduce themselves, and to be subject to a process similar to natural selection. In its most extreme form, me reduces a human being to a 'memeplex' evolved for the benefit of memes. Ideas and skills do not, however, merely by competition or by a form of natural selection. Imitation does not provide an account of how we from each other, and still less of social change, for this often arises from dissent and originality. Memetic ignores the complexities of language, and it conspicuously disregards the elaborate exchanges during the c activity of teaching. Nonetheless, memetics has made an advance by turning away from the current obsession genes, and by provoking interdisciplinary debates about humanity as a 'political animal'. If memetics can a that human beings are argumentative and sometimes ra ways in which it can generate fruitful studies.

'Conversation is like playing tennis over the net in a different shape.'

In the 1940s, during the drafting of the Universal Declaration of Human Rights, a philosopher said tha when we speak of human rights we raise the funda mental question, what is a human being? And h asked whether the human species is a social organism or merely an economic being or an animal.

The background of his misgivings appears in a sti earlier anecdote. An elderly professor reproaches h pupils. 'In my young day', he said, 'we used to ask t eternal question: "'what is man?"' (Man embraci woman, of course.) 'But', he went on, 'all you you people can say, is: "He *was* an ape."'

The professor evidently agreed with the p Alexander Pope, that 'The proper study of manki is man.' Pope described his own species as 'A be darkly wise and rudely great'; but, since Darw prominent writers have insisted on different ima each held out as based on biological science. appear as belligerent, macho cave dwellers, as m less hominids impelled by crude tribal instincts naked apes, or, more recently, as puppets of our genes, hence impelled by our biology to be violent, selfish, greedy, and lecherous. We are told that when we say we are acting on moral grounds that is a pretence: we are really furthering our ability to breed.

One objective of this article is to contribute to the debates which help people to make rational decisions on their own nature.

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SCIENTIFIC REPORTS

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Competition among memes in a world with limited attention

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SUBJECT AREAS:
INFORMATION THEORY AND COMPUTATION
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The wide adoption of social media has increased the competition among ideas for our finite attention. We employ a parsimonious agent-based model to study whether such a competition may affect the popularity of different memes, the diversity of information we are exposed to, and the fading of our collective interests for specific topics. Agents share messages on a social network but can only pay attention to a portion of the

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Competition-Induced Criticality in a Model of Meme Popularity

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Heavy-tailed distributions of meme popularity occur naturally in a model of meme diffusion on social networks. Competition between multiple memes for the limited resource of user attention is identified as the mechanism that poises the system at criticality. The popularity growth of each meme is described by a critical branching process, and asymptotic analysis predicts power-law distributions of popularity with very heavy tails (exponent $\alpha < 2$, unlike preferential-attachment models), similar to those seen in empirical data.

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transmitted from ,
Genes are remarkably stable; but, rarely, they mutate into another form. Mutant or not, a gene is frequently presented as responsible for a single trait, such as a person's blood group or a fly's eye colour.

A single gene, however, typically exists in many forms, often with slightly different actions; it also has multiple effects on development (pleiotropy); and

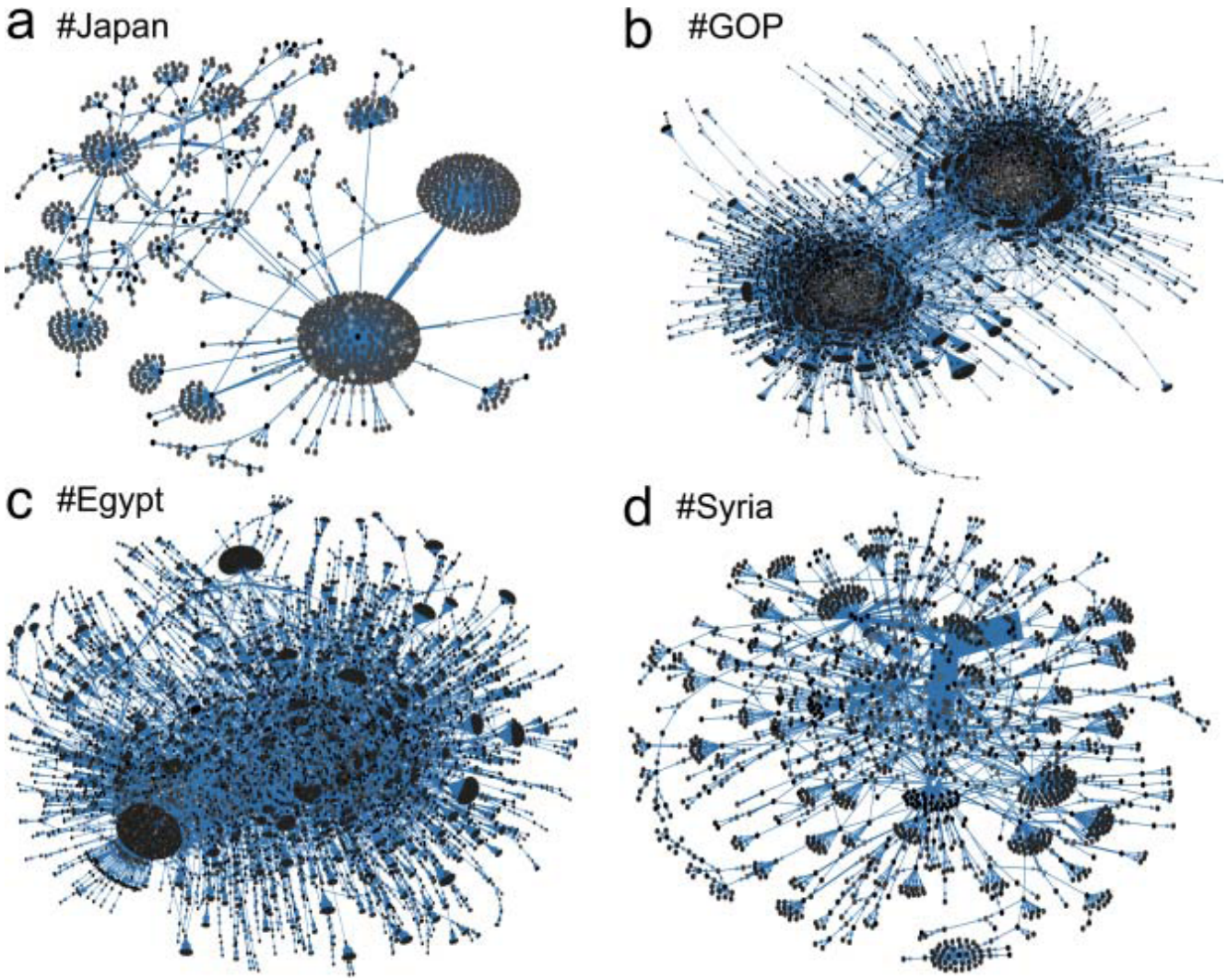


Figure 1 | Visualizations of meme diffusion networks for different topics. Nodes represent Twitter users, and directed edges represent retweeted posts that carry the meme. The brightness of a node indicates the activity (number of retweets) of a user, and the weight of an edge reflects the number of retweets between two users. (a) The #Japan meme shows how news about the March 2011 earthquake propagated. (b) The #GOP tag stands for the US Republican Party and as many political memes, displays a strong polarization between people with opposing views. Memes related to the ''Arab Spring'' and in particular the 2011 uprisings in (c) #Egypt and (d) #Syria display characteristic hub users and strong connections, respectively.

Weng, L., Flammini, A., Vespignani, A.&Menczer, F. Competition among memes in a world with limited attention. Sci. Rep. 2, 335; DOI:10.1038/srep00335 (2012).

19-Sep-82 11:44 Scott E Fahlman :-)
From: Scott E Fahlman <Fahlman at Cmu-20c>

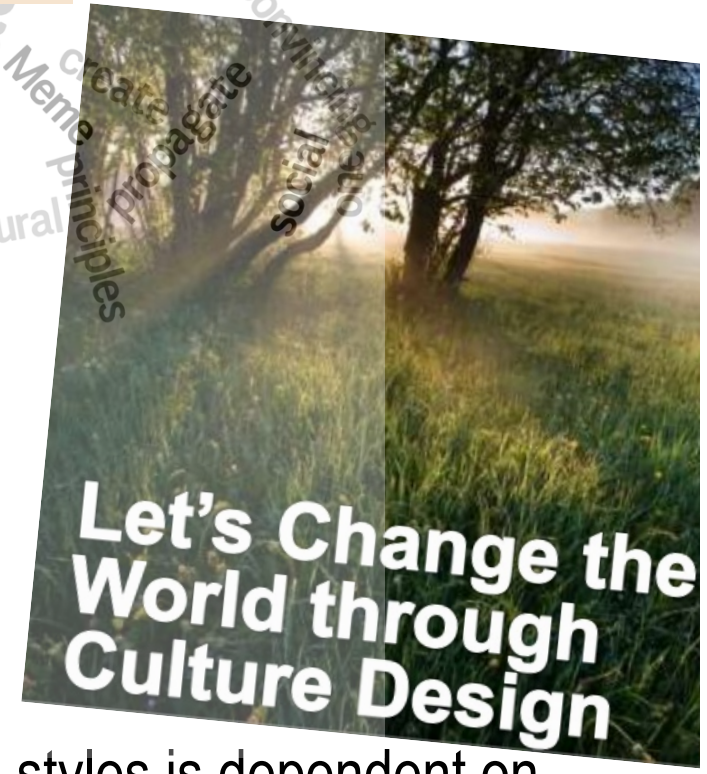
I propose that the following character sequence for joke markers:

:-)

Read it sideways. Actually, it is probably more economical to mark things that are NOT jokes, given current trends. For this, use

:-(

:-)



- The necessary change of our culture and life styles is dependent on the successful creation, propagation and spread of the respective memes of sufficiency and sustainability. (→more research needed…)