

WHITE PAPER

CULTURE AND SUSTAINABLE DEVELOPMENT >

**PHILIPPE
VANDENBROECK**

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BIO

PHILIPPE VANDENBROECK

Philippe Vandebroeck
is co-founder and Partner
at shiftN.
www.shiftn.com/about

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This short paper wants to revisit the question about the relationship between ‘culture’ and ‘sustainable development’. We are dealing with two encompassing terms that are notoriously difficult to define. The question has, therefore, a very abstract character and – despite my background as a generalist and a practitioner – I have also chosen to tackle it conceptually.

Let me first say something about where I’m coming from. I’ve worked for twenty years as a consultant, helping clients to work their way through complex decision-making contexts. In that work we rely on a range of skills, from sophisticated modeling to the simple act of careful listening. As a rule sustainability, increased quality of life or, more recently, increased resilience are the macroscopic goals to which our clients’ decisions want to contribute. About a week ago I was in Brussels, sitting in a meeting room at one of our clients, a foundation. Around the table were what can be considered to be movers and shakers in our national health care system. Very senior civil servants, industry representatives, academics and thought leaders who have a significant impact on health care policies. My mind went back to late 2006 when I started to work with the foundation on an action research program focused on patient participation in health care policy. I felt that much had happened since. New actors had come to the fore, new alliances had been shaped, new discourses had been picked up, and, yes, ultimately also policy agendas were shifting. But I could not point to a specific tipping point in that concatenation of projects and discussions over a ten-year period. The mental image I had of that process of change was of a rootlike, rhizomatic structure of every widening resonance, criss-crossing flows of intentions and ideas, and unplanned synergies. It’s that kind of image – actually more an intuition than an image – that informs my understanding of societal transformations towards sustainability. In reflecting on the role of culture, I took that intuition as a cornerstone.

SUSTAINABLE DEVELOPMENT

I’d like us to take a step back and consider human affairs from a higher vantage point. Yes, let’s go to the moon and look back on our habitat. What do we see? Gaia. An astonishingly beautiful entity is floating in space illuminated by the sun and powered by its energy. Evolutionary biologists tell us that **this constant flux of energy, this constant disequilibrium is at the root of the emergence and evolution of life on Earth.** Living requires a constant driving force, an unceasing

chemical reaction powered by energy differentials: *“If life is nothing but an electron looking for a place to come to rest, death is nothing but that electron come to rest”* (Lane, 2015).



GAIA

AN ASTONISHINGLY BEAUTIFUL ENTITY IS FLOATING IN SPACE ILLUMINATED BY THE SUN AND POWERED BY ITS ENERGY.

However, despite our remote vantage point we don't see everything from the observation platform on our satellite. What we don't see is the noosphere, the intangible domain of human thought. Indeed, life on this planet has evolved in a highly unlikely way, giving way to complex, conscious life forms. Our minds are a most improbable biological machine. They, together with the metabolic infrastructure that has evolved over billions of years, are now a conduit for this restless flow of energy.

This is where 'sustainable development' comes in. As an idea it is the memetic equivalent to solar energy. As a vision of a better way of organizing human affairs it creates a disequilibrium, an intensity gradient that orients and channels

memetic and energetic flows on Earth. In other words: **sustainable development is an attractor that animates a process of societal change.** But it differs from the progressive utopias of the nineteenth century that projected their myths (such as the classless society) into the future. The vision they projected had the character of a finished whole anchored in an already directed past. Today we may bemoan the difficulty to define once and for all what sustainable development is and how a world looks like that is shaped in line with its tenets. But probably it is precisely that nebulous and partially open-ended character that harbors the great opportunity of that vision of sustainable development. Despite all our efforts to ensnare it in arrays of indicators, sustainable development refuses to be nailed down. It remains slippery. We see contours, but we can't draw a fixed image of it.



**THIS IS WHERE 'SUSTAINABLE DEVELOPMENT' COMES IN.
AS AN IDEA IT IS THE MEMETIC EQUIVALENT TO SOLAR ENERGY.**

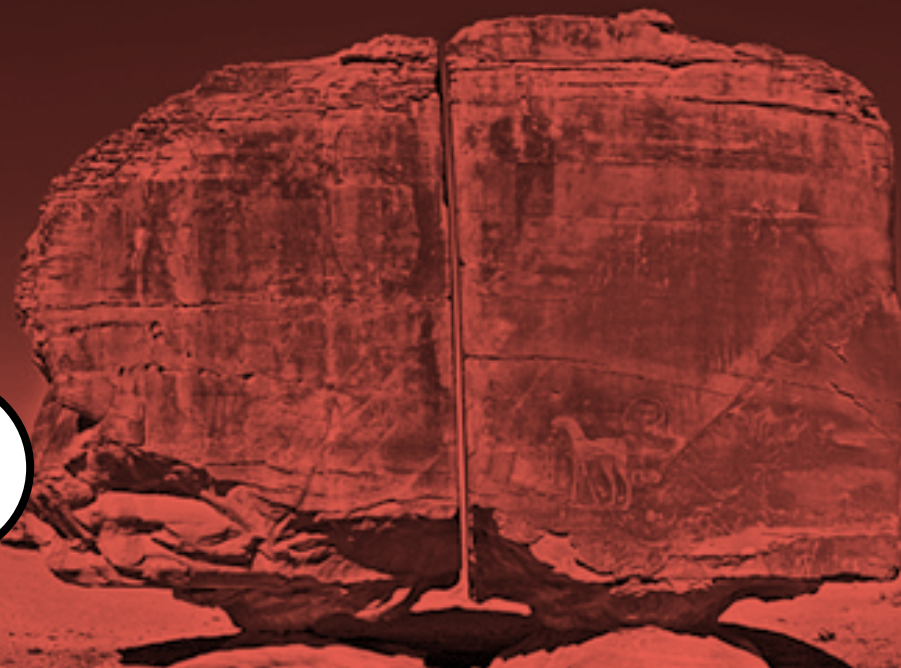
MORPHOGENESIS

This (reluctant) acceptance of a fluid attractor as a driver of human affairs meshes with a much richer understanding of the change that we are in the process of making our own. In our intellectual history, we have moved from myth to the linear causalities of classical science to Hegelian dialectics as models to explain how things come into being and change. In the last century, we have integrated all of these strands in a more sophisticated understanding of change as growth, as morphogenesis. True, the heritage of our Enlightenment past still weighs heavily on us. We are accustomed to thinking of change as a 'project'. We (architects, engineers, entrepreneurs, policy makers) start with an idea in mind of what we want to achieve and with a supply of raw material needed to achieve it. And we stop when the material has taken on that intended form. **In change understood as a morphogenetic process things happen as a result of a confluence of forces and materials.** Certainly these forces can be imbued with human intelligence and intentionality but that does not change their essential quality.

A few important insights follow from embracing this morphogenetic conception of change.

- **The difference between organism and artifact dissolves.** A statue and a rock formation differ in the degree of human involvement. But both are shaped through morphogenetic processes involving energy and materials. In the case of the statue, these flows have been merely enriched with human ingenuity.


A STATUE AND A ROCK FORMATION DIFFER IN THE DEGREE OF HUMAN INVOLVEMENT. BUT BOTH ARE SHAPED THROUGH MORPHOGENETIC PROCESSES INVOLVING ENERGY AND MATERIALS.



- **In the shaping of our reality, the primacy shifts to process rather than final form. Form is always emergent.** The anthropologist Tim Ingold has pointed out how even a mundane object such as a brick, with its seemingly totally predictably rectangular outline, does not result from the imposition of form onto matter but from the contraposition of equal and opposed forces immanent in both the clay and the mould in which it is pressed. *“In this field of forces, the form emerges as a more or less transitory equilibration.”* (Ingold, 2013:24)
- **In a morphogenetic process - in which form is emergent - a key role falls to resistance, friction and ambiguity.** Richard Sennett has described craftsmanship as a practice of ‘doing and getting better’ in the messy confrontation of human ingenuity with materials (Sennett, 2009). Doing and getting better means learning. And here we connect to a key insight from systems thinking which sees viability (i.e. sustainability) rooted in adaptiveness and resilience. When human beings are an involved part of the stickiness of problems is due to our mental maps. Today we understand much better that change is inevitably a collaborative process of learning and sense-making. Action is part of that process. Interventions in the sticky, problematic settings we are dealing with invites us to question our basic assumptions with respect to the nature of those situations. Action is not an imposition of form but a probing into an opaque reality. Peter Checkland, a pioneer in Soft Systems Methodology, has titled his most recent book ‘learning for action’ and that is a very fitting synthesis of what human-induced change processes are all about. The spirit of morphogenetic change informs much of what is held to be cutting edge management and policy practice today. I am thinking of resilience-focused adaptive management, transition governance to guide complex socio-technical systems to a more sustainable equilibrium, and Saras Sarasvathy’s theory of ‘Effectual Entrepreneurship’. Consider the jargon that pervades the associated literature: networks, coalitions, co-evolution, tipping point, chance, conflict, negotiation, reflexive governance, variation and selection, windows of opportunity, bounded rationality. All these conceptualizations of complex change processes boil down to the constant and non-linear interplay between visioning, experimenting (and carefully assessing the attendant friction, ambiguity and uncertainty) and reframing our understanding of where these frictions come from and how we can handle them.

The anthropologist Marc Augé mused: *“Perhaps we are in the process of learning to change the world before imagining it, converting to a sort of political and practical existentialism. (...) We now need to turn towards the future without projecting our illusions on it, to (...) learn to push back gradually and prudently the frontiers of the unknown.”* (Augé, 2014) That this kind of approach can lead to breakthroughs

and epoch-making change is evident. I'm particularly fond of a case study developed by David Turnbull that demonstrates how the construction of Chartres cathedral in the early 13th century can only be understood from a morphogenetic perspective. The building boasted the tallest roof in the Western world and offered an unprecedented area for window openings. Architectural plans for the building have never been found, and the names of the masterminds behind these structural innovations (if ever such individuals existed) are not known. What we do know is that there was no common method of measurement and no scientific knowledge of the structural mechanics necessary to keep such a tall building standing. So we can wonder: where did it come from? Almost certainly the builders did not operate from blueprints but erected the building in a sequence of full-scale experiments.



**TURNBULL:
“THE STRUCTURE OF
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RESULTS FROM THE
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EPIPHANEIA

Turnbull: *“The structure of the cathedrals results from the combination of factors. They all interact as a whole to produce a particular form. The ‘Gothic Style’ as such was not in the minds of the cathedral builders...”* In other words: the form was emergent. In other talks, I have developed a very similar story about the construction of the Large Hadron Collider and the discovery of the Higgs boson at CERN in Geneva. But I could also point to more mundane examples of my practice, working with change agents in public administrations, civil society and corporations. Their finely granular stories of how they experience complex change – with its shifting alliances, the nebulously distributed political support, the glacial pace of discourse rejuvenation, sudden breakthroughs and implosions – lean more towards an account of how a craftsperson wrestles with his or her material than a neatly structured report of a coolheaded planner.

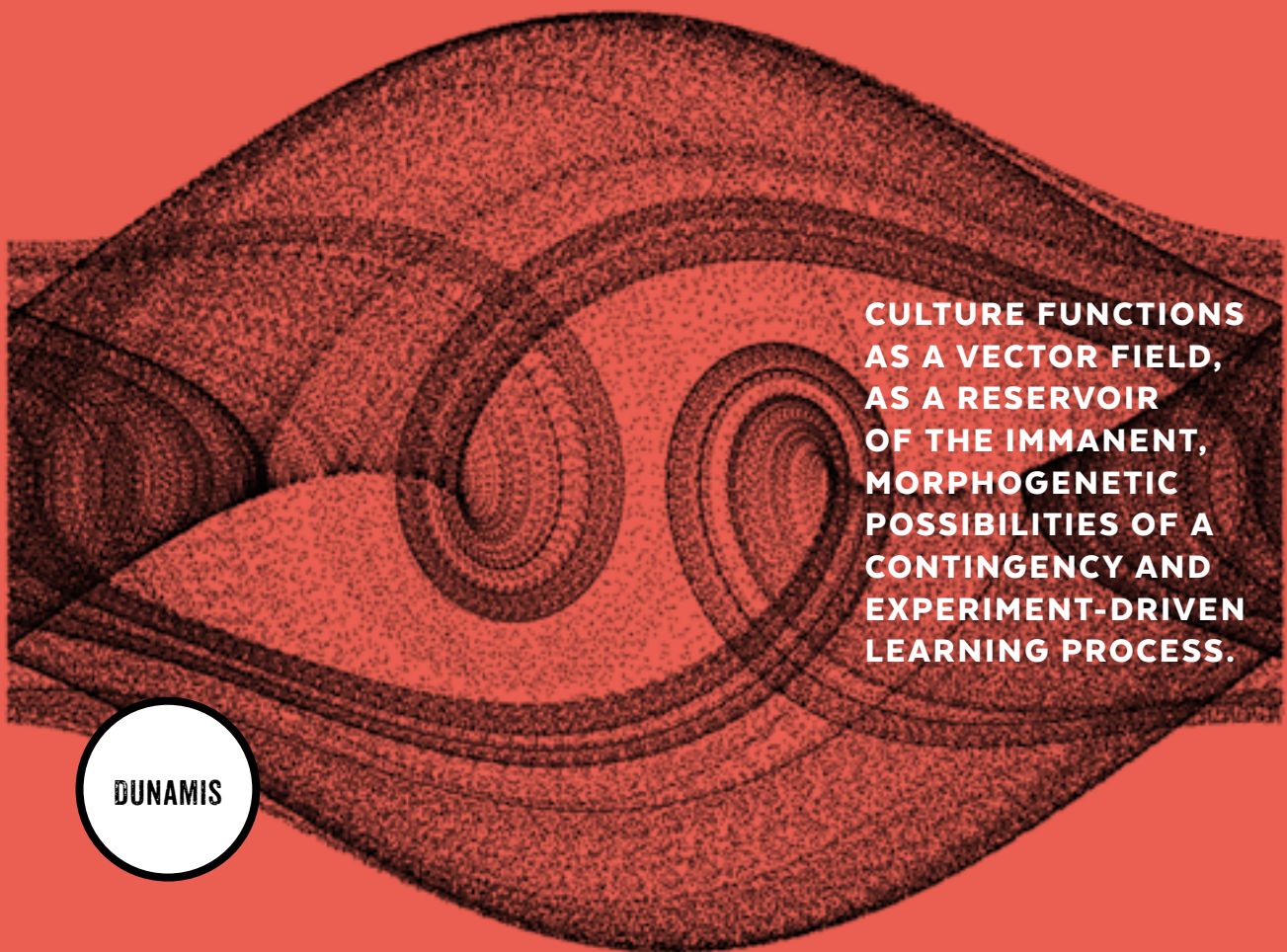
CULTURE

Up to this point, I haven’t talked about culture. I set out to position sustainable development as basically an intensity gradient that animates a process of change, a broad societal transformation. It orients human ingenuity – and all the material and energetic flows people interact with – but in an open and flexible way. I have connected that open future horizon with an understanding of change as a morphogenetic process. Change so understood is no longer a question of imposing a form, a pre-conceived plan upon a reluctant environment in a sequence of discrete steps but a continuous, contrapuntal coupling of human intentionality with the ambiguity, friction and uncertainty embedded in our world. In other words, change becomes, in essence, a learning process.

So what is the role of culture? There is no single agreed definition of ‘culture’ but I propose to stick to a few key elements: Culture is a set of patterns of behavior – anchored in attitudes, values and beliefs – that is distinctive for a particular group of people. Understood as such culture comes close to the concept of ‘habitus’ as proposed by Bourdieu: a shared, enacted point of view from which we structure the world and bring some degree of coherence in our preferences and actions in a dynamic environment.

As shorthand for a distinctive repertoire of skills, knowledge, and good practices culture functions as a resource. Something that to a certain level can be codified, that is embodied in artifacts (‘material culture’, which in its relationship to sustainability is one of the focal points in this conference: ‘culture *in* sustainability’) and

that can be transmitted from one generation to the next. But in this sense **culture is to an extent also immanent, or virtual. It is not only what we can observe and point at – a repository of codifiable practices and beliefs – but it is also the unarticulated possibilities for morphogenesis that are embedded but not yet realized in that socio-biologico-technical reality.** Think of a phase space for a dynamic physical system. It represents all possible states of the system, with each possible state of the system corresponding to one unique point in the phase space. At one particular time, the system occupies a specific place in that phase space but given another balance of forces there are many others that it might have occupied.



Similarly culture functions as a vector field, as a reservoir of the immanent, morphogenetic possibilities of a contingency and experiment-driven learning process. Gilles Deleuze referred to this virtual register as a 'diagram'. In this understanding of culture as a meta-resource it definitely echoes the third role that this COST ac-

tion has identified for culture in sustainable development: 'culture as sustainable development', as immanent foundation and structure for achieving the aims of sustainability.

Culture, however, also functions as a filter or a structuring agency. We said it was distinctive for a particular group of people. Hence, it unifies a segment of society but inevitably it also demarcates it from others. So culture embodies unity at one scale and diversity at another. Within a community, culture leads to the articulation of strata. For instance, social classes and roles sediment over time through a variety of sorting mechanisms and are consolidated via legal or theological codification. But communities do not merely exist next to one another. They also interpenetrate one another as the societal fabric is traversed by different cultural lineages (ethnic, linguistic, professional, consumptive,...). Hence culture not only articulates stratified structures but also meshworks. These meshworks help to connect local repositories in such a way that increasing momentum is generated to guide the development of complex and inert socio-technical systems towards sustainable development. It is in that sense that I see culture contributing to sustainability in the second role put forward in the framework emerging from this COST-action: culture as a mediating agent or 'culture *for* sustainable development'.



CHAOS

REFLECTING BACK ON THE WORK OF ME AND MY COLLEAGUES IT SEEMS THAT A LOT OF IT IS ABOUT CREATING ARTIFACTS, DISCOURSES AND FORA WHERE THESE MESHWORKS CAN RECONFIGURE THEMSELVES.

Reflecting back on the work of me and my colleagues it seems that a lot of it is about creating artifacts, discourses and fora where these meshworks can reconfigure themselves. In our work, we create intercalary elements, boundary objects and bridging spaces where this morphogenetic process of experimentation, hybridization and learning can take place. I think that is the role that, in essence, falls to us as ‘consultants’. In a participatory setting we function as conduits between stakeholders, carefully listening to the different voices, capturing and translating them so that what may originally be in opposition can find at least a temporary accommodation. We create system maps that provide a rich picture of a problematic situation where different communities can relate to. We create or leverage discourses that unlock new opportunity spaces.

WICKED PROBLEMS

It is in that sense that I’m interested in that notion of ‘wicked problems’. It presents an opportunity to develop a novel perspective on challenges that mix social and technical complexity. To exploit that potential, we should refrain from the temptation to reify wicked problems. Various inventories have been made of characteristics of wicked problems: unclear causalities, numerous intervention points, scarce and low-quality data, multiple stakeholders with opposing interests, uncertainty regarding costs and benefits of interventions, path dependency, etc. But we should treat these lists of attributes as a heuristic, as an invitation to reframe the friction we recognize in the wickedness and not as a checklist to tick boxes to eventually conclude that this is, and that isn’t a wicked problem. Wicked problems are everywhere if we want them there. Conversely, we can choose to see simplicity in situations of breathtaking complexity. **For me, the notion of wicked problem functions as an intercalary element to connect different communities-of-practice: people engaged in systems thinking, in dialogue and in designerly approaches to deal with complexity. These competences reflect different sides of a transcultural problem-solving ethos that is characterized by depth, empathy, and idealism.** We need dedicated methodologies and approaches that blend these sentiments in a (more or less) structured approach to problem-solving for sustainable development. In my practice I have been inspired by the soft systems methodology because it emphatically makes us aware of differences in culture and worldview when confronting problematic situations. So it shows us where stratification exist and at the same time it offers a down-to-earth and respectful

approach to creating an accommodation, a temporary meshwork between these worldviews.

Embodied resource and immanent repository, enabler and constrainer, homogenizer and differentiator: culture seems to play all these roles at once in the irrevocably messy transition to sustainable development in which we are caught up. Deleuze wrote: *“It is no longer a question of imposing a form upon a matter but of elaborating an increasingly rich and consistent material, the better to tap increasingly intense forces. What makes a material increasingly rich is the same as what holds heterogeneities together without ceasing to be heterogeneous.”*

My friend Luc Hoebeke translated the same idea in a more evocative image: *“I would like to conjure a 10-billion people society, where every inhabitant of this planet is part of a number of small-scale decision groups, and that from these groups – which naturally exemplify opposing interests and which naturally consist of imperfect individuals – emerges a social texture that, stumblingly, learns to deal with the dilemmas that belong to our species, with questions about life and death, good and evil, love and hate, give and take, me and the other. And, despite the multitudes involved, I would like to imagine that the desperate belief in the gift of life offers a sufficient condition to achieve a certain degree of coherence, in much the same way that each of us shows some degree of coherence despite our innumerable neurons.”*



SELECTED READING

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COLOPHON

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