2014

Bringing complexity into service design research
Sangiorgi, Daniela

Suggested citation:

Bringing Complexity into Service Design Research

Systemic perspectives in Design for Services

Daniela Sangiorgi _ ImaginationLancaster, Lancaster University
About me …

1998 - 2007  SDI Agency _ INDACO Department, Politecnico di Milano, Italy

2000 - 2004  PhD on Service Design, INDACO Department, Politecnico di Milano, Italy

2003  Mads Clausen Institute, University of Southern Denmark, DK

2007  ImaginationLancaster, Lancaster University, UK
Imagination Lancaster
an open and exploratory research lab that

>> investigates emerging issues, technologies and practices

>> combines traditional science and social science methods with the practice-based methods arising from the arts
Why me .. ?

[SYSTEMIC DESIGN SYMPOSIUM _ Oslo 2014]

[Maffei & Sangiorgi, 2006]
Why me .. ?

- SERVICE INTERACTION DESIGN
  (Artefacts & Behaviors)
- SERVICE DESIGN INTERVENTIONS
  (Norms & Values)
- ORGANISATIONAL TRANSFORMATION
  (Fundamental Assumptions)
Systemic perspectives in Design for Services
(Service) Design evolution

Systemic Considerations in Service Design

- Scaling
- Participation
- Transformation

Conclusions
Models of design evolution

Interaction Design: “focusing on how human beings relate to other human beings through the mediating influence of products”

[Buchanan, 2002: 11]
Models of design evolution

- **Design 1.0** Traditional Design
  - Communication Challenges
  - Product Challenges
  - Service Challenges
  - Experience Challenges

- **Design 2.0** Product/Service Design

- **Design 3.0** Organizational Transformation Design
  - Systems Challenges
  - Organization Challenges
  - Industry Challenges

- **Design 4.0** Social Transformation Design
  - Country Challenges
  - Society Challenges
  - Planet Challenges

SYSTEMIC DESIGN SYMPOSIUM _ Oslo 2014
# Models of design evolution

**Table 1. Four Generations of Design Methods**

<table>
<thead>
<tr>
<th>Generation</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Methods</strong></td>
<td>Movement from craft to standardized methods</td>
<td>Instrumentality, Methods customized to context</td>
<td>Design research and stakeholder methods Design cognition</td>
<td>Generative, empathic &amp; transdisciplinary</td>
</tr>
<tr>
<td><strong>Authors &amp; trends</strong></td>
<td>Simon, Fuller Design Science Planning</td>
<td>Rittel, Jones Wicked problems Evolution</td>
<td>Archer, Norman User-centered Design Participatory Design</td>
<td>Dubberly, Sanders Generative Design Service Design</td>
</tr>
<tr>
<td><strong>Systems influences</strong></td>
<td>Sciences Systems engineering</td>
<td>Natural systems Hard systems</td>
<td>System dynamics Social systems Soft systems</td>
<td>Complexity</td>
</tr>
</tbody>
</table>
Service Design origins

Two first contributions:

- **SERVICE AS A PRODUCT**: service as an object of design → focus on the design process/design management (Mager, 1997: Hollins, 1991)

- **SERVICE AS A COMPLEX INTERFACE**: from a concept of services as complex organisations to the one of complex interfaces to the user → focus on the specificity of design intervention (Pacenti, 1998)
Interaction paradigm

‘set of concepts, values and tools that derive from the interpretation of services and of Service Design, starting from the area and the moments of interaction between the user and the supply system’ (Sangiorgi, 2004).
Emerging practices

Changing of practices because of the growing of complexity and collaborative nature of service projects and society demands.

[Sangiorgi, 2009]
Emerging practices

Change in the context and nature of the service interactions:
- from one-to-one to many-to-many interactions;
- from sequential to open-ended interactions;
- from within to amongst organisations.
Emerging practices

Service Design is
- ‘scaling up’ (complex systems)
- ‘reaching out’ (working with different disciplines and professions)
- ‘deepening in’ (working within service organisations and user communities)
Design for Services Map

IMAGINING FUTURE DIRECTIONS FOR SERVICE SYSTEMS

GENERATING FUTURE SCENARIOS

PROPOSING NEW BEHAVIOURS

BUILDING AND SHAPING VISIONS

MASS REQUIREMENTS

APPLICATIONS

COMMUNITY CO-CREATION

COMMUNITY OF CREATORS

ENGAGING AND CONNECTING PEOPLE

ENABLING COLLABORATIVE SERVICES

EXPLORING NEW COLLABORATIVE SERVICE MODELS

DESIGNING INTERACTIONS, RELATIONS AND INTERFACES

DESIGNING FOR EXPERIENCES

DESIGNING INTERACTIONS

DESIGNING FOR CO-EXPERIENCES

DESIGN FOR SERVICES

A HUMAN-CENTRED APPROACH

DESIGNING INTERACTIONS TO SHAPE SYSTEMS AND ORGANISATIONS

SHAPING SERVICE SYSTEMS

PROMOTING A HUMAN-CENTRED SERVICE CULTURE

PROMOTING AUTHENTIC AND EXPERIENTIAL ENCOUNTERS

PROMOTING NEW VALUE-CREATION PATHWAYS

EVALUATING AND IMPROVING SERVICES AND INTERACTIONS

SUPPORTING EMOTIONAL INTERACTIONS

FACILITATING CREATIVE COLLABORATIONS

UNDERSTANDING PEOPLE’S BEHAVIOURS, EXPERIENCES AND PRACTICES

SYSTEMIC DESIGN SYMPOSIUM _ Oslo 2014

[Meroni & Sangiorgi, 2011]
Complex service systems

IMAGINING FUTURE DIRECTIONS FOR SERVICE SYSTEMS

GENERATING FUTURE SCENARIOS

DESIGNING FOR SERVICES
A HUMAN-CENTRED APPROACH

SHAPING SERVICE SYSTEMS

DESIGNING INTERACTIONS TO SHAPE SYSTEMS AND ORGANISATIONS

Supporting strategic interactions

Designing new organisational forms

Enabling new value configurations

Understanding people's behaviours, experiences and practices

Supporting empathic interactions

Exploring new service models

Enabling new service models

Implementing new service models

Integrating new service models

Designing service models

Interactions

Service models

Service system

[Meroni & Sangiorgi, 2011]
Service Interactions Design

The self-service pay-as-you-go car

Streetcar's range of self-service cars and vans are available 24/7 for rent by the hour, day, week or month.

Book any car in the fleet, online or by phone, and then use your Streetcar smartcard to pick up and return the car. Hourly rates start from £3.95, or £39.50 for 24 hours.

6 to 1

Studies show car sharing significantly reduces the number of cars on the road. Every car shared results, on average, in 6 private cars being taken off the road.
Product-service system

<table>
<thead>
<tr>
<th>Product #1</th>
<th>Product #2</th>
<th>Product #3</th>
<th>Product #4 (+ Service)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D phase</td>
<td>Plate &amp; frame reactor</td>
<td>Tube reactor</td>
<td>Deployment treatment unit</td>
</tr>
<tr>
<td>0.5 litre min⁻¹ capacity</td>
<td>41 litre min⁻¹ capacity</td>
<td>250 litre min⁻¹ capacity</td>
<td>667 litre min⁻¹ capacity</td>
</tr>
</tbody>
</table>
New Service Models

Welcome to Southwark Circle
Southwark Circle is a membership organisation that provides on-demand help with life’s practical tasks through local, reliable Neighbourhood Helpers, and a social network for teaching, learning and sharing.

Being a member
Find out about the benefits of joining Southwark Circle and meet some members

Being a Helper
See how you can be rewarded for helping out in the community

Gifts for friends and relatives
Give a gift with a difference. Choose from a range of membership options.

Take a look at the calendar to see what’s on...

Membership includes:
- Access to social activities
- A free phone number to call for practical advice

Tokens
- 1 Token Can Be Used For:
  - 1 Hour neighbourhood helper
  - 1 social event

Get connected and start using a mobile phone
Start meeting people who live nearby
POST-16 EDUCATION
IMPROVING THE LEARNER JOURNEY

STUDYING HERE I'VE REALISED THAT
HAIRDRESSING IS
ABOUT MATHS, ABOUT
BIOLOGY. I JUST DIDN'T
SEE THIS IN SCHOOL.

I LEFT SCHOOL AT
15. NO ONE SAID
TO ME ABOUT
WHAT I COULD DO
WHAT I LIKED TO
GET ON WITH IT.

I WAS DISCOURAGED OF MY ABILITIES AT
SCHOOL BECAUSE I WASN'T EVEN
AT ELL ENOUGH TO SEE THE DUST
OF MART.
Different levels and modes of practices

Policy
Service System
Frameworks
Service Model
Service Experience
Communication

Uscreate
Collab. Change
NHSi
Futuregov
The Innovation Unit
Snook
Different models of practices

**Embedded designer**
Full time strategic-level employee responsible for developing organisational design capacity, as well as for specific service redesign programmes, e.g. Cornwall Council, Capita, Helsinki Design Lab, Exchange project, Scottish Government.

**Internal agency**
A service design unit (normally multi-disciplinary) works with other parts of the organisation on a project-by-project basis. e.g. Social Innovation Lab Kent, MindLab, Behavioural Insights Team.

**External agency**
Consultancy from an independent design practice on a project-by-project basis. e.g. Ideo, Snook, U+Creatives, ThinkPublic, LiveWork, Engine, STBY – and many others.

**Brokered intervention**
Organisations such as the Design Council, or Nesta, in order to address a perceived market failure, broker design work for a public sector body, thereby introducing new expertise in a de-risked way, and supporting design businesses through procurement. e.g. Patchwork, Creative Councils, Design Council Challenges and public service leadership projects.

**Design-led startup service**
Design-led teams move outside of the traditional public service institutions to start services that meet a specific public need independently. e.g. Participle, Good Gym, Care4Care.
Design evolution

Systemic perspectives in Design for Services

- Scaling
- Participation
- Transformation

Conclusions
Systems metaphors and approaches

<table>
<thead>
<tr>
<th>SYSTEMS</th>
<th>UNITARY</th>
<th>PLURALIST</th>
<th>COERCIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIMPLE</td>
<td>Simple–Unitary</td>
<td>Simple–Pluralist</td>
<td>Simple–Coercive</td>
</tr>
<tr>
<td>COMPLEX</td>
<td>Complex–Unitary</td>
<td>Complex–Pluralist</td>
<td>Complex–Coercive</td>
</tr>
</tbody>
</table>

[Jackson, 2010]
Systems models and approaches

- **functionalist**
  - Efficiency, adaptation and survival
  - Complete understanding of the system and its parts
  - Control of operations

- **interpretative**
  - Effectiveness and stakeholder commitment
  - Collaborative interpretation of systems
  - Plan systemic improvements; idealised design

- **emancipatory**
  - Empowerment and emancipation of oppressed individuals
  - Open and democratic debates
  - Radical transformation

- **postmodern**
  - Exception and Emotion
  - Surface different viewpoints and support diversity
  - Challenge and break down

[Jackson, 2010]
Drivers for complexity

Scale

Participation

Transformation
Systemic perspectives

- Scale: Blueprint
- Participation: Co-design
- Transformation: Embedding Design
- Infrastructuring
- Service Ecology: Co-creation
Systemic design principles

[Jones, 2014]
Design evolution

Service Design evolution

- Scaling
- Participation
- Transformation

Conclusions
We’re looking for budding Steven Spielbergs to film and make a documentary about their experiences in head and neck services. Don’t you take the opportunity, you can work with our professional film maker to produce your own documentary.

For more information contact:

Experience based Design → Education system re-design
Service Systems

**Service supply system:** “coherent and systematic organisation of the all physical and human elements of the client-company interface, that are necessary for the building of the service performance whose commercial and quality levels have been already defined” [Eigliere Langeard, 1987]

**SERVICE BLUEPRINT**

**Complex service systems** are configurations of people, technologies, and other resources that interact with other service systems to co-create value (Maglio et al. 2009).

**SERVICE ECOLOGY**
Blueprint

A service blueprint is a picture or map that accurately portrays the service system so that the different people involved in providing it can understand and deal with it objectively regardless of their roles or their individual points of view.

It visually displays the service by simultaneously depicting the process of service delivery, the point of customer contact, the roles of customer contact, the roles of customers and employees and the visible elements of the service.

[Zeithmal and Bitner, 2007]
Building a service blueprint (Zeithmal and Bitner, 2007)
Service blueprint
Interdependence & interactions

“A system is a complex whole the functioning of which depends on its parts and the interactions between those parts” (Jackson, 2010: 3)

“Models are explicit, simplifying interpretations of aspects of reality relevant to the purpose at hand. They seek to capture the most important variables and interactions giving rise to system behaviour. They are used to experiment on as surrogates for the real-world system.” (Jackson, 2010: 55)
MULTI-LEVEL SERVICE DESIGN (Patricio et al., 2011)
Functionalist perspective
inform service operations and development
System as closed and under control
**Service ecology**

A service ecology is a system of actors and the relationships between them that form a service. The service ecology takes a systemic view of the service and the context it will operate in.

Service ecologies include all actors affected by a service, not only those directly involved in production or use.

Ultimately, sustainable service ecologies depend on a balance where the actors involved exchange value in ways that is mutually beneficial over time.

Source: Livework Studio Ltd
Service ecology - system

Like a biological ecology, a service ecology is marked by strong interrelationships and dependencies among its different parts.

*In an intensive care unit, for example, the jobs of nurses and doctors can be seen to fit together in complementary ways, and the nature of their work is both extended by and dependent on the technologies they use in patient care*

Change in an ecology is systemic. When one element is changed, effects can be felt throughout the whole system.

(Nardi, 2000)
Service ecology
“The GIGA maps are used for drawing the boundaries and framing of the system and for generative processes.” (Sevaldson, 2013: 6)
Understanding the needs of people living with Multiple Sclerosis

(NHS Institute)

Interpretative perspective
If used within collaborative processes
Open system – close interrelationships between its subsystems

Legend / menu

[Diagram showing various elements and interactions related to people living with Multiple Sclerosis and their needs]
Service Blueprint

Efficiency
Complete understanding of the system and its parts
Control of operations

Service ecology

Worldviews
Collaborative and emergent interpretation of systems
Effective (re)use of what is there
Design evolution

Service Design evolution

- Scaling
- Participation
- Transformation

Conclusions
## Customer participation

<table>
<thead>
<tr>
<th>Low: Customer presence required during service delivery</th>
<th>Moderate: Customer inputs required for service creation</th>
<th>High: Customer co-creates the service product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products are standardized</td>
<td>Client inputs customize a standard service</td>
<td>Active client participation guides the customized service</td>
</tr>
<tr>
<td>Service is provided regardless of any individual purchase</td>
<td>Provision of service requires customer purchase</td>
<td>Service cannot be created apart from the customer's purchase active participation</td>
</tr>
<tr>
<td>Payment may be the only required customer input</td>
<td>Customer inputs (information, materials) are necessary for an adequate outcome, but the service firm provides the service</td>
<td>Customer inputs are mandatory and co-create the outcome</td>
</tr>
</tbody>
</table>

**Examples:**

**End consumer**
- Airline travel
- Motel stay
- Fast-food restaurant

**Business-to-business customer**
- Uniform cleaning service
- Pest control
- Interior greenery maintenance service

**Source:** Adapted from Hubbert (1995)

(Bitner et al., 2007)
Customer as ‘partial employee’

Customers can influence both the quality and quantity of production

→ Reduce direct contact between customers and service supply system to optimise productivity (service automisation)

→ Consider customers as partial employee and maximise through design and training their contribution (service co-production)

(Bitner et al., 2007)
Service co-design

Setting up user involvement where users and frontline personnel are provided with generative tools and techniques to innovate services (Holmlid, 2009)

- Knowledge sharing (Users/staff as resourceful)
- Engagement & sustained participation
- Legitimacy of participation (they have a permission to change things (Miller & Hamilton, 2008)
Techniques and modes to engage & co-design

[Steen et al., 2011]

[SNOOK]

[Bowen et al., 2013]
Requisite Variety: Who should participate?

**SOCIAL SYSTEM VARIETY** → optimal selection of stakeholders: “requisite variety amongst stakeholders for a shared problematic situation must account for social system variety”

“Social variety considers all distinctions that could make a difference in outcomes and action in the world (values, positions and stands, affiliations, perspectives, level of power, vulnerability, etc.)”
Pluralistic and inclusive approach

Conflicting values, beliefs and needs

Collaborative interpretation of systems

Design led and solution oriented process

(idealistic design)
Service Co-production

Co-production as a new way of thinking about public services has the potential to deliver a major shift in the health, education, policing and other services are provided:

*Co-production means delivering public services in an equal and reciprocal relationship between professionals, people using services, their families and their neighbours. Where activities are co-produced in this way, both services and neighbourhoods become far more effective agents of change.*

[Boyle and Harris, 2009]
### Service Co-production

<table>
<thead>
<tr>
<th>Responsibility for delivery of services</th>
<th>Responsibility for design of services</th>
<th>Professionals as sole service deliverers</th>
<th>Professionals and service users/community as co-planners</th>
<th>No professional input into service planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionals as sole service deliverers</td>
<td>Traditional professional service provision</td>
<td>Professional service provision but users/communities involved in planning and design</td>
<td>Professionals as sole service deliverers</td>
<td></td>
</tr>
<tr>
<td>Professionals and users/communities as co-deliverers</td>
<td>User co-delivery of professionally designed services</td>
<td>Full co-production</td>
<td>User/community delivery of services with little formal/professional</td>
<td></td>
</tr>
<tr>
<td>Users/communities as sole deliverers</td>
<td>User/community delivery of professionally planned services</td>
<td>User/community delivery of co-planned or co-designed services</td>
<td>Self-organised community provision</td>
<td></td>
</tr>
</tbody>
</table>

(Boyle and Harris, 2009)
Participation as Empowerment & Emancipation

When participation is pushed to its extremes it meets other agendas generally named as community or citizens ‘empowerment’: participation here becomes a mean and an end in itself (White, 1996).

Community Action research: participation is part of an awakening self-reflective process that questions existing power and societal structures and aims at change as an often conflicting bottom up movement (Ozanne & Saatcioglu, 2008).
Social Change Projects

Alcohol reduction project

Co-create research methods - Methods stations
How do you empower people to co-design research when they may not have the expertise to know what options there might be?
Building Capabilities

Experience-based Design

Train staff and patients to take video interviews

- Allow questions to be asked about who benefit from particular system designs;
- Seek to ensure the full participation of those who are affected by systems designs who might not otherwise be involved:
- Make **Boundary Judgments** transparent: assumptions about what is inside the system of concern and what belongs to its environment.

[Jackson, 2010]
Service Design & Emancipation

Limited critical reflection on power dynamics & boundary making:

- Service Design may be hampered by inattention to issues of power and politics (Collins & Cook, 2014)

- “without critical understanding of the different types and facets of power operating within a specific setting [...] the discourses of service user empowerment and democratization of service provision risk being deployed simplistically obfuscating more subtle forms of oppression and social exclusion” (Donetto et al., forthcoming)
Empowerment and emancipation:
Give voice & Build Capability
Design Facilitation
Focus on learning and transformation
Co-design

Effectiveness (best solution) & stakeholder commitment

Design leading

Focus on inclusivity and designing

Co-creation

Empowerment and emancipation: Give voice & Build Capability

Design Facilitation (‘design oneself out’)

Focus on learning and transformation
Design evolution

Service Design evolution

- Scaling

- Participation

- Transformation

Conclusions
Transformation Design

‘because organisations now operate in an environment of constant change, the challenge is not how to design a response to a current issue, but how to design a means of continually responding, adapting and innovating. Transformation design seeks to leave behind not only the shape of a new solution, but the tools, skills and organisational capacity for ongoing change’ (Burns, 2006: 21).
Understanding Change

organisation
organisational change

users/communities
social change

paradigm

mission

culture

core processes

SYSTEMIC DESIGN SYMPOSIUM _ Oslo 2014

[Sangiorgi, 2011]
Embedding Design

- A
- B
- C
- D

- in-house design team
- rest of organisation

Systemic Design Symposium _ Oslo 2014

[Bailey, 2012]
Embedding Design

Design legacies

Organizations are full of design legacies, however flawed and poorly suited. If service designers want to effect real change in real organizations, they have to be able to articulate these organizational design practices.

(Junginger, 2014)
Formative Context is ‘the set of institutional arrangements and cognitive imageries that inform the actors’ practical and reasoning routines [...] a major obstacle to effective experimentation and adoption, and more generally to flexibility and innovation, is limited learning, that is, the limited capability to reflect upon and reframe the institutional and cognitive grounds that support the habitual “ways of doing things”’ (Ciborra and Lanzara, 1994).
Interceptor

Increase viability and sustainability
Open and purposeful systems in constant transformation
Inform a mind shift in managers
Indeterminate nature of services

‘the fundamental inability of design to completely plan and regulate services, while instead considering its capacity to potentially create the right conditions for certain forms of interactions and relationships to happen’ (Meroni & Sangiorgi, 2011: 10)

Design an ‘action platform’: ‘a system that makes a multiplicity of interactions possible’ (Manzini, 2011: 3)
Generative emergence

“arising of novel and coherent structures, patterns, and properties during the process of self-organization in complex systems” (Goldstein, 1999: 49)
“complexity theory is exploring how the structure and properties seen in emergence partly result from the serendipity-like amplification of random events in complex systems. The chance or “noisy” event can be utilized by the organization to explore or test different system configurations and, therefore, may represent an evolutionary response of the social system to changes in the environment” (Goldstein, 1999: 68)
‘Design in Use’

“Rather than focusing on involving users in the design process, focus shifts toward seeing every use situation as a potential design situation [...] So there is design during a project, but there is also design in use. There is design (in use) after design (in the design project)” (Bjögvinsson et al., 2012: 106)
‘Infrastructuring’

“The really demanding challenge is to design where no such consensus seems to be within view, where no social community exists. Such political communities are characterized by heterogeneity and difference with no shared object of design. They are in need of platforms or infrastructures, “agonistic” public spaces— not necessarily to solve conflict, but to constructively deal with disagreements.” (Bjögvinsson et al., 2012: 116)
“Postmodernists emphasize, instead, that we have to learn to live with the incommensurable, accepting multiple interpretations of the world and being tolerant of difference. Indeed, they want to ensure diversity and encourage creativity by reclaiming conflict and bringing marginalized voices forward to be heard.” (Jackson, 2003)
POSTMODERN
Exception and Emotion
Surface different view points and support diversity
Agonistic spaces
Design evolution

Service Design evolution

- Scaling
- Participation
- Transformation

Conclusions
Systemic perspectives

**SCALE**
- **BLUEPRINT**: Planning processes and interdependence
- **SERVICE ECOLOGY**: Mapping resources and relationships

**PARTICIPATION**
- **CO-DESIGN**: Design Tools and Methods for engagement
- **CO-CREATION**: Building capabilities & empowerment

**TRANSFORMATION**
- **EMBEDDING DESIGN**: Transforming mind sets and practices
- **INFRASTRUCTURING**: Creating platforms for emergence & dialogue

SYSTEMIC DESIGN SYMPOSIUM _ Oslo 2014
<table>
<thead>
<tr>
<th>BLUEPRINT</th>
<th>SERVICE ECOSYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning processes and interdependence</td>
<td>Mapping resources and relationships</td>
</tr>
<tr>
<td>INTERDEPENDENCE</td>
<td></td>
</tr>
<tr>
<td>CO-DESIGN</td>
<td>CO-CREATION</td>
</tr>
<tr>
<td>Design Tools and Methods for engagement</td>
<td>Building capabilities &amp; empowerment</td>
</tr>
<tr>
<td>SOCIAL SYSTEM VARIETY</td>
<td></td>
</tr>
<tr>
<td>EMBEDDING DESIGN</td>
<td>INFRASTRUCTURING</td>
</tr>
<tr>
<td>Transforming mind sets and practices</td>
<td>Creating platforms for emergence &amp; dialogue</td>
</tr>
<tr>
<td>FORMATIVE CONTEXTS</td>
<td>EMERGENCE</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>CRITICAL SYSTEMS H.</td>
<td></td>
</tr>
<tr>
<td>GIGAMAPPING</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>EMERGENCE</td>
<td></td>
</tr>
<tr>
<td>DESIGN LED &amp; DESIGN CENTRED</td>
<td>DECENTRALISED &amp; EMERGENT</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td><strong>BLUEPRINT</strong></td>
<td><strong>SERVICE ECOLOGY</strong></td>
</tr>
<tr>
<td>Planning processes and interdependence</td>
<td>Mapping resources and relationships</td>
</tr>
<tr>
<td><strong>INTERDEPENDENCE</strong></td>
<td><strong>GIGAMAPPING</strong></td>
</tr>
<tr>
<td><strong>CO-DESIGN</strong></td>
<td><strong>CO-CREATION</strong></td>
</tr>
<tr>
<td>Design Tools and Methods for engagement</td>
<td>Building capabilities &amp; empowerment</td>
</tr>
<tr>
<td><strong>SOCIAL SYSTEM VARIETY</strong></td>
<td><strong>CRITICAL SYSTEMS H.</strong></td>
</tr>
<tr>
<td><strong>EMBEDDING DESIGN</strong></td>
<td><strong>INFRASTRUCTURING</strong></td>
</tr>
<tr>
<td>Transforming mind sets and practices</td>
<td>Creating platforms for emergence &amp; dialogue</td>
</tr>
<tr>
<td><strong>FORMATIVE CONTEXTS</strong></td>
<td><strong>EMERGENCE</strong></td>
</tr>
</tbody>
</table>

**BOUNDING & CONTROLLED SYSTEMS & PROCESSES**
TOWARD CONVERGENCE & ORDER

**OPEN & EMERGENCE SYSTEM & PROCESSES**
TOWARD DIVERGENCE & DISORDER
Existence of tacit system perspectives & philosophies

**DESIGN LED & DESIGN CENTRED**
- **BLUEPRINT**
  - Planning processes and interdependence

**DECENTRALISED & EMERGENT**
- **SERVICE ECOLOGY**
  - Mapping resources and relationships

**BOUNDED & CONTROLLED SYSTEMS & PROCESSES**
- **CO-DESIGN**
  - Design Tools and Methods for engagement

**OPEN & EMERGENCE SYSTEM & PROCESSES**
- **CO-CREATION**
  - Building capabilities & empowerment

**EMBEDDING DESIGN**
- Transforming mind sets and practices

**INFRASTRUCTURING**
- Creating platforms for emergence & dialogue

**FORMATIVE CONTEXTS**

**SOCIAL SYSTEM VARIETY**

**INTERDEPENDENCE**

**BOUNDARY FRAMING**

**EMERGENCE**
Thought 1

Not *stretching* Service Design but positioning within existing knowledge on e.g. system design

“"Systemic design is distinguished from service or experience design in terms of scale, social complexity and integration. Systemic design is concerned with higher order systems that encompass multiple subsystems.”” (Jones, 2014)
Thought 2

Make tacit understandings of services and systems, *explicit* and an object of debate (together with theories of change)

“*Service systems often are described as existing in the world waiting to be discovered by service researchers. Their reification often brings with it an assumption of a coherent, bounded entity where what is inside and outside the system is unambiguous.*” (Blomberg & Darrah, forthcoming)
Thought 3

We need to consider not only what designers do and how (methods and approaches), but also what is their role, influence and position within the ecology of actors and ongoing processes of change.

“recognition of the specificity of location and the generative limits of method, such that a responsible practice is one characterized by humility rather than hubris, aspiring not to massive change or discontinuous innovation but to modest interventions within ongoing, continually shifting and unfolding, landscapes of transformation.” (Suchman, 2011: 16)
Thought 4

Provide tools not only to map and visualise complexity and systems as objects of design, but also to enhance reflexivity of practitioners.

"the need to introduce new skills and tools for reflexive practices within projects that hold transformational aims is evident. This might include ways to consciously track and reflect on processes, conflicts, roles, design decision points, mapping multiple perspectives and exploring individual and collaborative interpretations and evaluations of design situations and outcomes.” (Sangiorgi, 2011: 37)
THANK YOU

d.sangiorgi@lancaster.ac.uk


Multilevel service design: from customer value constellation to service experience blueprinting


