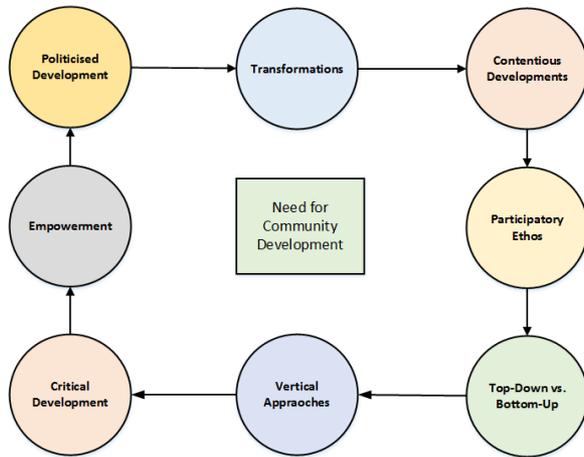**TECH2503-18 Community Media Production**

Lecture Four: The Need for Community Development

1   Introduction: Transformations

"Development communication seeks to transform existing living conditions through communication strategies, practices and technologies" (Howley, 2010, p. 181).

1.1   Contentious Debates

"The field of development communication is marked by contentious debates over the goals, methods, and efficacy of development programmes" (Howley, 2010, p. 181).

Stop obsessing about planes and trains, and start using roads better
https://www.theguardian.com/commentisfree/2016/oct/20/stop-obsessing-planes-trains-use-roads-better-third-heathrow-runway-hs2-car

Losing our way on the roadmap of Britain
https://www.theguardian.com/world/2016/oct/21/losing-our-way-on-the-roadmap-of-britain

1.2   Participatory Ethos

"The ways in which community media's participatory ethos contributes to the formation of vibrant, inclusive, and sustainable communities" (Howley, 2010, p. 181).

1.3   Top-Down vs. Bottom-Up

"This top-down model of communication fails to recognise the dialogic character of communication that is central to community building and maintenance" (Howley, 2010, p. 182).

Using Freire's Four Quadrants of Participation
http://www3.hants.gov.uk/using-freire_s-four-quadrants-of-participation.pdf

"Integrated Media is an approach to potent community/people change. Different print, audio or video mediums can be combined to develop an integrated media approach that through sensitive community participation and people oriented approach can work wonders across the communities. This integrated approach believes that media is not just means/tool but a very dynamic process" https://communitymediaindia.wordpress.com/2012/09/09/integrated-community-media/

1.4 Vertical Approaches

"Freire's (1970/2006) critique focused attention on the dominant paradigm's approach to identifying and addressing development problems. Specifically, Freire questions the efficacy of development communication projects that identified problems and offered solutions based on the observations and recommendations of outside experts. Freire's criticism underscores the problem with vertical or top-down approaches to communication that emphasise information transfer instead of local knowledge construction. In other words, Freire held that the dominant approach to development communication was dismissive of local populations and underestimated the community's potential to alter its own circumstances in an independent and autonomous fashion" (Howley, 2010, p. 183).

1.5 Critical Development

"Instead, Freire (1970/2006) argued that development projects must promote dialogue, cultivate critical thinking, and stimulate self-reflexive action (*praxis*). Doing so raises the community's awareness of the wider social conditions and relations that lead to and exacerbate local development problems. Through a process of *conscientisation*, communities would learn to analyse their situation, identify their needs, acquire the skills to address these issues, and organise themselves to effectively deal with these problems. In this way, Freire believed, communities would come to realise their potential to transform their everyday lives and experiences" (Howley, 2010, p. 183).
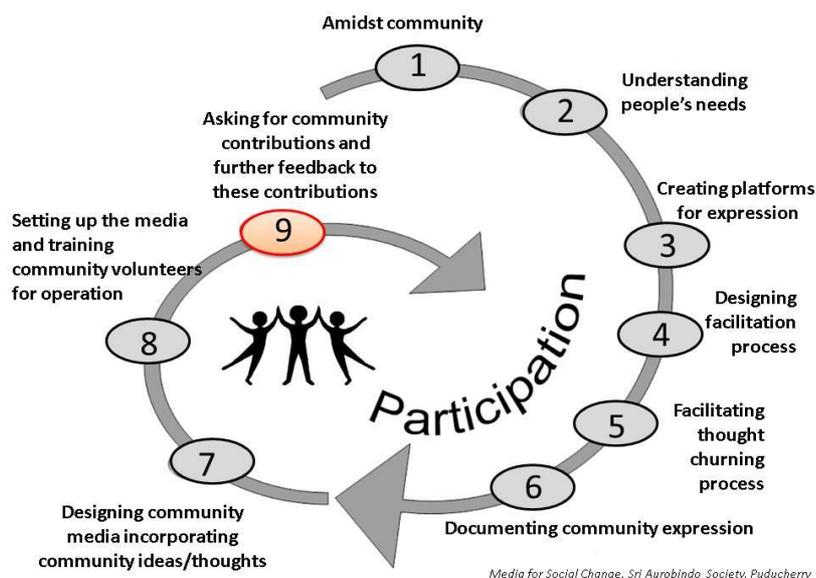
1.6 Empowerment

"Freire's (1970/2006) approach yields two important insights for community media studies. First, Freire recognised the value of grassroots media for empowering the marginalised individuals and groups within a local community. Grassroots and community-based media provided the resources and skills for oppressed people to not only comprehend their marginal status but also challenge and alter the circumstances of their oppression. Second, Freire's analysis foregrounds the contested character of community relations. Rather than view communities as homogenous social entities, Freire's educational practice sought to illuminate social, economic, and cultural differences within the community" (Howley, 2010, p. 183).

1.7 Politicised Development

"Thus, Freire (1970/2006) sought to 'politicise' community relations as a means for identifying the sources of conflict that divide interest groups and inhibit collaborative efforts. Only through the recognition and negotiation of these differences, Freire contended, could local groups work together and effectively address common interests and concerns" (Howley, 2010, p. 183).

2 The Lure of Participation

Media for Social Change, Sri Aurobindo Society, Puducherry

https://mediaandpeople.wordpress.com/tag/community-media/

"Equally important, the insights and innovations associated with participatory approaches to development communication would have enormous implications for community media theory and practice" (Howley, 2010, p. 183).

2.1 Amplification & Enhancement

"Substantive and sustained participatory practices are deemed impractical in a large scale. Grassroots media, on the other hand, represented an effective means of amplifying and enhancing existing channels of horizontal communication within a particular region or locality. As this insight gained currency, a range of initiatives predicated on the twin pillars of *access* to communication systems and *participation* in media planning, production, and management, began to coalesce around the use of community-based media in development communication" (Howley, 2010, p. 184).

2.2 Cultural Relevance

"Likewise, participatory approaches proved invaluable to the production of development messages that were culturally relevant and appropriate within a specific social setting. This technique was useful for overcoming resistance to development messages that either ignored or were insensitive to local cultural values, forms and practices" (Howley, 2010, p. 184).

"Integrated Media is an approach to potent community/people change. Different print, audio or video mediums can be combined to develop an integrated media approach that through sensitive community participation and people oriented approach can work wonders across the communities. This integrated approach believes that media is not just means/tool but a very dynamic process."
https://communitymediaindia.wordpress.com/2012/09/09/integrated-community-media/

2.3 Agency & Ownership

"Participatory communication provides local communities with a sense of agency and ownership of development projects. Rather than view themselves as somehow deficient or lacking in their ability to effect social change, communities could, through participatory methods, reassert and reclaim their capacity to transform their daily lives" (Howley, 2010, p. 184).

2.4 Generative Development
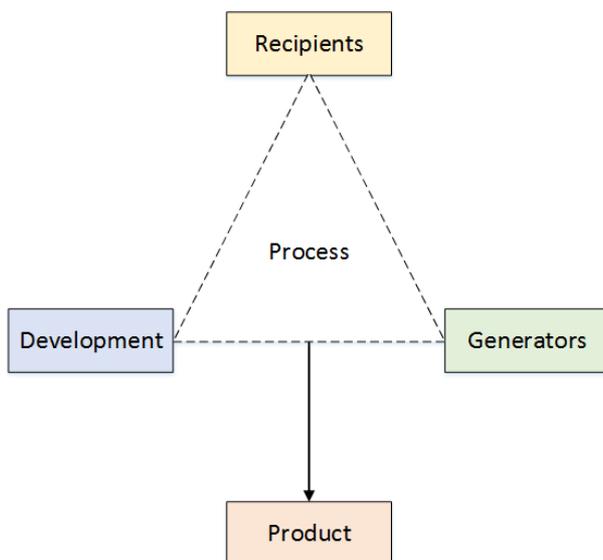
"Participatory communication 'enables people to go from being recipients of external development to generators of their own development' (Bessette, 1996, p.1)" (Howley, 2010, p. 184).

2.5 Process vs Product

"Participatory communication underscores the importance of 'process' over 'product' in the context of community communication" (Howley, 2010, p. 184).

3 Awareness & Capacity Building
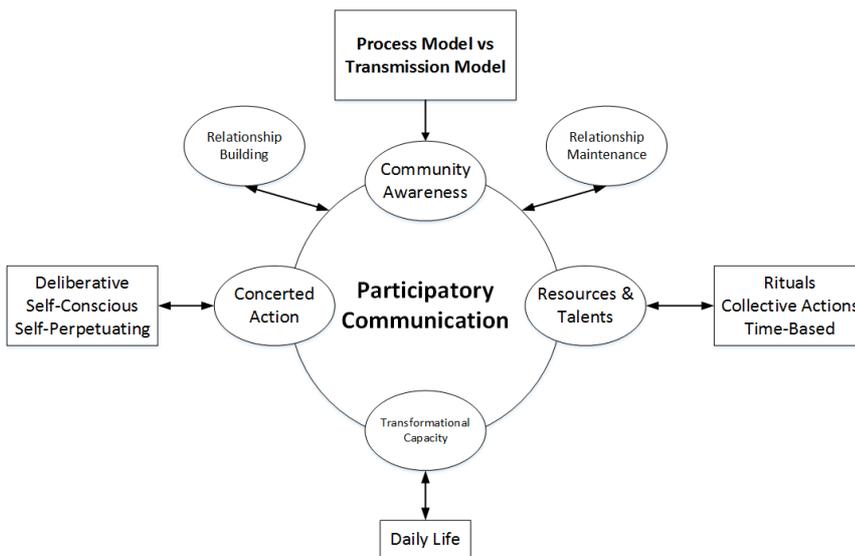
"The goal of participatory communication is twofold. First, participatory communication raises the community's awareness of its own resources and talents as well as its capacity to alter or transform some aspect of daily life. Second, participatory communication encourages communities to act in concert and to do so in deliberate, conscious, and self-perpetuating fashion that builds and maintains social relations over time" (Howley, 2010, p. 184).

3.1 Ritual vs Transmission

"James Carey's (1988) ritual model of communication. In contrast to the transmission model of communication, which views communication as a linear, hierarchical method of information transfer across space, a ritual model understands communication as a collective activity in which participants (re)produce knowledge, (re)create meaning, and (re)construct communal relations and collective identity over time. In sum, the emphasis on 'process' associated with participatory communication underscores the fundamental and decisive relationship between communication and community" (Howley, 2010, p. 184).

3.2 Local Settings & Practices

"From a theoretical perspective, then, participatory communication promotes greater participation in public life, stimulates creative problem solving, and fosters a sense of community cohesion that acknowledges difference – difference that can overcome, but not necessarily erased, through shared decision making and collective action. In local settings, however, participatory communication is a far more complex sociocultural process: one that demands critical scrutiny of actual practices" (Howley, 2010, p. 184).

3.3 Tools of Media Production

"More ambitious approaches to participatory communication put the tools of media production – microphones, audio and video recorders, computers, and the like – into the hands of community members" (Howley, 2010, p. 185).

4   Development Initiatives
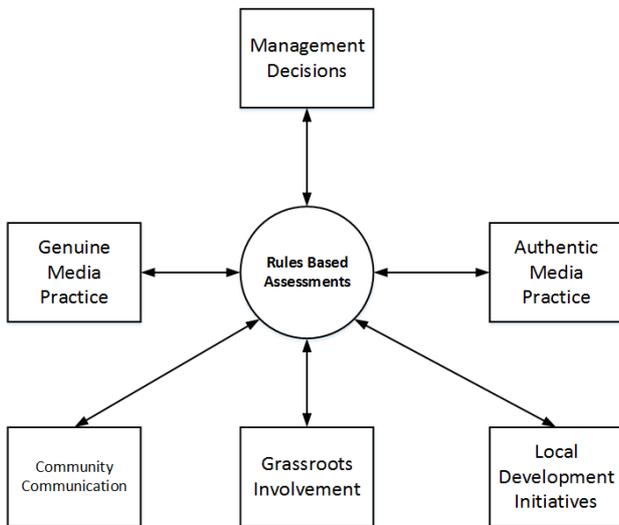
"At yet another level, participatory communication includes instances in which community members have a role in the management and decision-making process of grassroots media outlets. Thus, participatory communication also refers to community owned and operated media outlets established for the explicit purpose of facilitating community communication and promoting local development initiatives" (Howley, 2010, p. 185).

4.1   Authenticity
"Instead of trying to develop hard-and-fast rules for what constitutes 'genuine' or 'authentic' forms of participation, development practitioners, communication scholars, and media workers are better served by conceptualising participation along a *continuum*" (Howley, 2010, p. 185).

https://consultations.leicester.gov.uk/city-development-and-neighbourhoods/belgrave-road-improvements/
http://www.leicester.gov.uk/goldenmile
http://www.visitleicester.info/welcome-to-leicester/connecting-leicester/belgrave-circle/
http://www.itv.com/news/central/2016-01-05/people-urged-for-ideas-for-leicesters-golden-mile/
https://www.theguardian.com/cities/2015/nov/26/lessons-from-leicester-the-uks-unlikely-new-poster-city-for-cycling
https://leicesterccg.wordpress.com/category/meetings/
http://www.leicestermercury.co.uk/belgrave-road-mum-and-daughter-knocked-down-and-injured-during-golden-mile-shopping-trip/story-29698689-detail/story.html
http://www.leicestermercury.co.uk/belgrave-residents-proposed-plans-reduce-lanes/story-28286829-detail/story.html

4.2   Empirically Grounded
"Herein lies the heuristic value of community media: They are sites for empirically grounded analysis of participatory communication in a variety of sociocultural settings" (Howley, 2010, p. 185).

4.3   Critical Evaluation
"Instead of applying a generic definition of participation across disparate cases, this tack focuses our energies and attention on the structural, economic, political, and cultural factors that enable and constrain participatory communication within a particular place. Indeed, attending to these factors, at the level of the local community, allows us to critically evaluate the character and quality of participatory communication in the era of global communication" (Howley, 2010, p. 185).

5   Creating Space
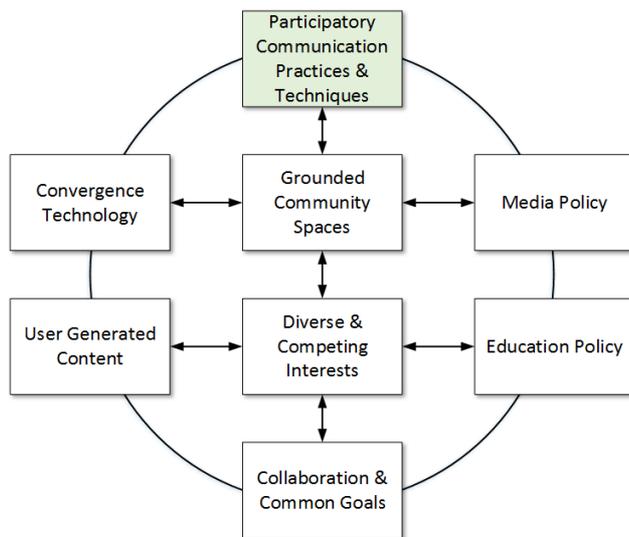
"Through the use of participatory communication practices and techniques, community media create spaces in which diverse, sometimes competing interests can work collaboratively to achieve common ends" (Howley, 2010, p. 185).

5.1   Re-conceptualisation

"Shawn Sobers argues that in an era of digitisation, convergence technologies, and user generated content, policy makers, educators, and media access organisations must reconceptualise the relationship between community media and media education" (Howley, 2010, p. 186).

5.2   Underpinning Participation

"Sobers' tentative conclusion is that community media's emphasis on participatory communication holds the key for ensuring the future relevance and viability of the community media service" (Howley, 2010, p. 186).

6   Complex Adaptive Systems

"**Complex Adaptive Systems** (CAS)" (Lanham, Jordan, & Jr, 2016, p. 49).
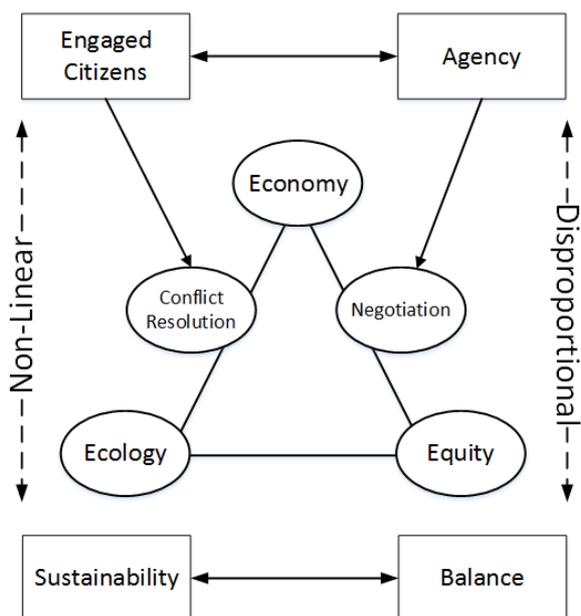
"This triangulated model, based on three pillars: ecology, economy, and equity, encourages urban designers, defined here as the planners, developers, architects, landscape architects, and engaged citizens who have agency in transforming the urban environment, to strive toward sustainability and suggest that the achievement of 'balance' through conflict resolution and negotiation among competing pillar interests will result in sustainability" (Lanham et al., 2016, p. 49).

"The relationship among equity, economy, and ecology are nonlinear as he suggests that effort and results may not always be proportional" (Lanham et al., 2016, p. 49).

"We primarily approach sustainability from the municipal, community, and organisational perspectives" (Lanham et al., 2016, p. 49).

"The pillars of ecology, economy, and equity and the urban designers that make up these pillars – are diverse, interact nonlinearly, self-organise, contribute to the development of emergent properties, and co-evolve with their environments" (Lanham et al., 2016, p. 49).

6.1   Dynamic Process
Using ideas from complexity science helps one view sustainable development not as a goal that can be reached through the achievement of balance, but as a dynamic process of continuous evaluation, action, and re-evaluation. A fitness landscape is one way to visualise this process of continuous co-evolution" (Lanham et al., 2016, p. 49).

"First, CAS are composed of diverse agents with an ability to learn as new information becomes available. This learning is not simply aimed at uncertainty reduction. Complexity science views uncertainty as fundamental to CAS – i.e. CAS face uncertainty that cannot be reduced with more information or better information processing" (Lanham et al., 2016, p. 50).

"Second, many relationships in CAS are non-linear. In non-linear relationships, small inputs can produce large outcomes, and large inputs can produce small outcomes. Thus, in CAS the system outputs may not be proportional to its inputs" (Lanham et al., 2016, p. 50).

"Third, CAS exhibit patterns of self-organisation. Self-organisation is the development of dynamic social structures and patterns through local interactions. Because systems self-organise, urban designers must recognise the limits of imposed structures, such as formal organisational hierarchies and regulatory control mechanisms, and shift their focus to ways to foster beneficial self-organised patterns of communication and relationships" (Lanham et al., 2016, p. 50).

"Fourth, CAS display emergent properties. Emergent properties are characteristic of a system that cannot be explained through analysis and understanding of its parts" (Lanham et al., 2016, p. 50).

"Fifth, CAS co-evolve with their environment. Co-evolution occurs when a systems reaction to an environmental stimulus alters the environment; thus, making the original reaction by the system no longer optimal, or even correct, and causing change within the system yet again. This is not, however, the way traditional approaches to sustainability have operate" (Lanham et al., 2016, p. 50).

"Sustainability, a truly broad concept, has been referred to as a new philosophy in which beliefs about the future, global environmentalism, equity, and biodiversity serve as a guide to decision making" (Lanham et al., 2016, p. 50).

6.2   Planners Triangle
"Campbell illustrated the idea of sustainable development through his planner's triangle model anchored by these pillars: economy, and equity. The model suggests that agents in each of these pillars share familiar interests, goals, and a common perspective on the world" (Lanham et al., 2016, p. 51).

"Urban designers who focus on the issues of social equity view the system as a source of conflict over the distribution of resources, services, and opportunities. For instance, competing interests among communities, neighbourhoods, and business units create systematic tension" (Lanham et al., 2016, p. 51).
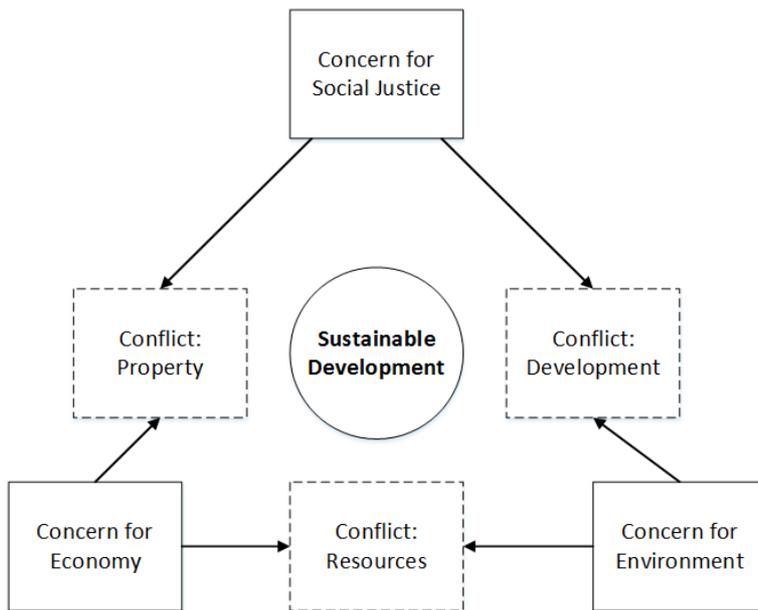
Figure 3.1 The 'Planners Triangle.' Adapted from Scott Campbell in Journal of the American Planning Association (1996) 62, 3: 296-312.

6.3 Conflict Resolution

"Divergence in interests and perspectives of agents in each domain of the triangle generates conflict at their respective intersections" (Lanham et al., 2016, p. 51).

"Conflict resolution, then, is perhaps better conceptualised as 'compromise' rather than 'transformation' of the system" (Lanham et al., 2016, p. 51).

"Traditional approaches to sustainable development focus on the achievement of sustainability and often assume that once sustainability is reached, the problem is solved. Ideas from complexity science imply that this type of approach will not work. Rather, sustainability development will require dynamic, process-oriented approaches that emphasise the ability of systems to continuously solve and re-solve problems" (Lanham et al., 2016, p. 55).

6.4 Relationship Focus
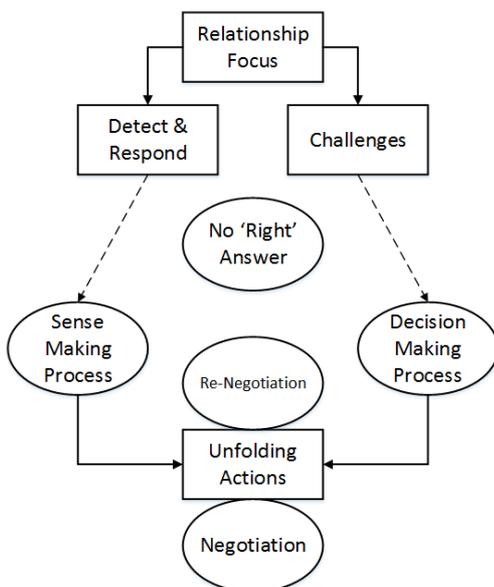
"To effectively address the challenges of sustainable development we must seek to develop relationship-focussed strategies that maximise a system's ability to detect and respond to challenges" (Lanham et al., 2016, p. 55).

"Because of the dynamic nature of the systems in which sustainability is sought, it is impossible to 'get it right.' This does not mean that nothing can/should be done to try to reach sustainability. Rather, it means that to foster sustainable development we must focus on getting the processes for making sense, for making decision, and for taking action right. Such processes will involve paying attention to the system as it unfolds and continuous negotiation and re-negotiation of challenges as they emerge" (Lanham et al., 2016, p. 55).

"Traditional approaches to sustainable development rely on the ability of individuals to accurately predict and control systems. Complexity science argues that because sustainability is emergent, it is not likely to be achieved through acts of prediction and control through laws and other forms of regulation. Rather, sustainability should be managed by fostering effective patterns of relationships within the systems in which sustainability is sought and the ongoing negotiation of interests based on demands at the time" (Lanham et al., 2016, p. 55).

6.5   Unpredictable Emergence
"Because outcomes of systems characterised by nonlinear relationships cannot be accurately predicted, they can be influenced but not controlled. In CAS, outcomes are the unpredictable emergent results of interactions among agents, and traditional methods, such as forecasting, are considerably less helpful in evaluating attempts as sustainability" (Lanham et al., 2016, p. 55).

"Junction dubbed the 'red light district' because of its 42 separate traffic lights cannot possibly do with fewer say the engineers who designed it" http://www.dailymail.co.uk/news/article-3644931/Junction-dubbed-red-light-district-42-separate-traffic-lights-possibly-fewer-say-engineers-designed-it.html

"Disappearing traffic lights. A second transport revolution in the Netherlands made mass cycling possible despite the rise in cars by removing motorized traffic from where cyclists and pedestrians needed to be" http://www.aviewfromthecyclepath.com/2014/02/disappearing-traffic-lights-how-second.html

Two Transport Revolutions. How Dutch streets changed twice in the 20th century. Assen, Netherlands
https://youtu.be/DJUIWqvhI9c

"Self-organised enabled interactions, specifically eye contact between motorists, cyclists, and pedestrians may have allowed for increased environmental awareness and sense-making during uncertain events" (Lanham et al., 2016, p. 56).

"Instead of designing organisations around the characteristics of agents, we should design organisations around the interactions between agents that create meaning and allow solutions to emerge and re-emerge" (Lanham et al., 2016, p. 56).

"Weick suggests effectuation (learning from 'prodding'), triangulation (learning from the application of several measures), affiliation (learning by comparing what one person sees with what another person sees and agreeing upon a mutually acceptable version of what happened), deliberation (learning through reasoning), and consolidation (learning from putting experiences into context) as procedures of making sense of the world it unfolds" (Lanham et al., 2016, p. 56).

6.6   Influencing Relationships
"Instead of searching for the right key, as the tradition of Rational Planning has held, attention should be placed on the continuous process of trying to positively influence the relationship systems and the ongoing dynamics involved in addressing these problems. Changes in the patterns of relationships that emerge over time, the ability to learn, and continuous behaviour adjustments also contribute to the unpredictability of system outcomes" (Lanham et al., 2016, p. 56).

"The need to innovate and change will always assert itself at some point in time, and we shall be forced to move to a new, temporary set of routines and regularities" (Peter Alan Quoted in Lanham et al., 2016, p. 57).

Table 3.1 Knowledge, Practices, and Dispositions for Sustainable Planning in and for CAS

Understanding Core Ideas and Cross-Cutting Concepts
Engage in Professional Practices
Develop Dispositions

Diverse Learning Agents: Variability is inevitable; diversity is a source of resilience and adaptive potential. Create diverse teams; manage the social and task challenges associated with working in diverse teams. Cultivate appreciation for diversity.

Nonlinear Relationships: Actions have unexpected consequences; expect surprise; systems have unpredictable trajectories. Pay mindful attention, learn to learn instead of learn to know; develop relationships to deal with surprise. Base your identity on your ability to deal with emergent futures rather than your expertise in solving yesterday's problems.

Self-Organisation: Order and structure are created through local interaction but may not be apparent at a local level. Develop relationships (one's own and others'), treat conversation as collective improvisation with emergent insights. Ground your identity in relationships and help others to do the same, appreciate identities in context.

Emergence: Systems' dynamics change over time and are history dependent. Re-arrange spatial and temporal relationships to allow the possibility of new elements and new systems. Value collective identities and help others do the same; treat trust, freedom, and relationships as emergent.

Co-Evolution: Systems of systems make mutual adjustments. Adapt to the world as the world is adapting to you; scan question, assess; think across levels. Appreciate interdependence and surprises; they are the essence of CAS in which we live. (Lanham et al., 2016, p. 58)

7 Emergent Interactions

"Researchers have identified some challenges in trying to understand complexity systems. For instance, individuals tend to interpret group-level behaviour as being dictated by centralised control or directed by a group leader. It is difficult to understand that group-level behaviour can emerge from interactions among agents who are continually modifying their behaviours in order to learn, adapt, and evolve in their environment" (Lanham et al., 2016, p. 58).

"Urban designers need to develop the intuition that variability be an important part of the dynamics of a complex system, a sign of system change and a source of order-creation, rather than seeing it just as a problem to be solved or an error to be ignored. They also need to understand enough about the self-organising dynamics of complex systems to enable them to resist the tendency to impose centralised control" (Lanham et al., 2016, p. 58).

"Planning for sustainable use in any particular community requires taking into account social, economic, and political ecosystems as well as natural ecosystems at multiple levels and timescales. It requires flexibility in (re-)defining the boundaries, networks, and hierarchies of a given system for different purposes and from different perspectives" (Lanham et al., 2016, p. 59).

"Developing the practice of questioning assumptions is critically important in situations where mutual reciprocity among a large set of factors can lead to unpredictable outcomes. Questioning assumptions can be particularly challenging when an urban designer is hoping to see results from his or her planned actions in a system. It is tempting to look for confirming evidence that one's simple solution is a magic bullet" (Lanham et al., 2016, p. 59).

7.1 Unexpected Outcomes

"Urban designers who adopt a complex systems perspective on sustainability will be better able to guard against such tendencies, instead, engaging in continual scanning and assessment, looking for unexpected outcomes and unintended consequences of actions taken to facilitate sustainability" (Lanham et al., 2016, p. 59).

"Relationships are critically important to managing uncertainty. Urban designers need to learn to participate effectively in dynamic systems of relationships with diverse partners so that they can adapt to evolving circumstances. Engage in

conversation, paying attention to how new ideas emerge from the interactional feedback as discursive partners exchange ideas" (Lanham et al., 2016, p. 59).

7.2   Dispositions
"Dispositions are not stable personality traits; rather, they are shaped by the myriad of experiences and evolving beliefs an individual brings to their current situations. Urban designers committed to sustainability need to develop dispositions that are useful for working in CAS" (Lanham et al., 2016, p. 59)

"Urban designers need to develop dispositions that favour careful attention to and nurturing of relationships, recognising that trust, freedom, and responsibility are emergent properties that continuously evolve out of the self-organising interactions of relationally interdependent agents" (Lanham et al., 2016, p. 59).

"Urban designers need to recognise that identity is a relational construct and to value identities that emerge in systems of relationships. From a complexity standpoint, all members of a team are self-regulating agents who simultaneously constitute an emergent social entity that co-regulates engagement in collective activity. An important aspect of urban designers' identities needs to be a focus on the relationships through which one's identity is defined, enacted, and continually shaped" (Lanham et al., 2016, p. 59).

7.3   Uncertainty
"Complexity theory leads to the understanding that the world is an endlessly creative place. As such, the world is an endlessly uncertain place" (Lanham et al., 2016, p. 60).

"As John Dewey noted, individuals are often tempted by the love of security to ignore doubt or to escape uncertainty prematurely, rather than accept that 'attainment of the relatively secure and settled takes place… only with respect to specific problematic situations; [a] quest for certainty that is universal, applying to everything, is a compensatory perversion.'" (Lanham et al., 2016, p. 60).

7.4   Potentialities
"Because complex systems are inherently unpredictable, treating the future as potential, possible, taking 'delight in the problematic' and enjoying the doubtful is preferable to relying on feelings of assurance. Learning to avoid over-reliance on past experience, pay attention as the world unfolds, and acknowledge uncertainty to one's collaborators can help one appropriate a welcoming stance toward a world that is unknowable in many of its aspects" (Lanham et al., 2016, p. 60).

"Fitness landscapes also serve as an effective integrator of key issues at the intersection of sustainable development and complexity science. These key issues: the problem of balance, the importance of relationships, and the recognition of our inability to control system outcomes are found at the intersection of complexity science and sustainable development" (Lanham et al., 2016, p. 60).

7.5   Non-Linear Interdependencies
"The role of nonlinear interdependencies, self-organisation, emergent properties, and co-evolution are important characteristics of CAS in improving our understanding of and generating new insights into the challenges of sustainable developments" (Lanham et al., 2016, p. 60).

"In summary, using complexity science perspectives, systems seeking sustainable development should strive to (1) operate at points on the fitness landscape that are far from equilibrium, (2) foster the development and maintenance of relationships among agents with diverse interests and perspectives, and (3) develop ways for dealing with fundamental uncertainty without simply relying on traditional strategies based on prediction and control" (Lanham et al., 2016, p. 60).

7.6   Prediction & Control
"How should a system be designed so that sustainability is more likely to emerge" (Lanham et al., 2016, p. 61).

"Complexity science and CAS thinking allow us to recognise our inherent inability to predict and control systems outcomes because of nonlinear relationships, self-organisation, emergent properties, and co-evolution. As one accepts the

presence of fundamental uncertainty in CAS, attentions is freed from attempts at uncertainty avoidance and modernist attempts at rational planning" (Lanham et al., 2016, p. 61) .

7.7 Embracing Uncertainty

"Attention can subsequently be redirected toward recognising and embracing uncertainty, utilising more adaptive strategies such as insurgent planning and communicative planning" (Lanham et al., 2016, p. 61).

"Sustainable development is something which we must continuously strive through multiple, humble, iterative projects from which we learn. As we move towards sustainability, we change the world" (Lanham et al., 2016, p. 61).

References:

Howley, K. (Ed.) (2010). *Understanding Community Media*. London: Sage.

Lanham, H. J., Jordan, M., & Jr, R. R. M. (2016). Sustainable Development - Complexity, Balance, and a Critique of Rational Planning. In S. A. Moore (Ed.), *Pragmatic sustainability - Dispositions for Critical Adaptation*. London: Routledge.

Table 3.1 Knowledge, Practices, and Dispositions for Sustainable Planning in and for CAS

	Understanding Core Ideas and Cross-Cutting Concepts	Engage in Professional Practices	Develop Dispositions
Diverse Learning Agents	Variability is inevitable; diversity is a source of resilience and adaptive potential.	Create diverse teams; manage the social and task challenges associated with working in diverse teams.	Cultivate appreciation for diversity.
Nonlinear Relationships	Actions have unexpected consequences; expect surprise; systems have unpredictable trajectories.	Pay mindful attention, learn to learn instead of learn to know; develop relationships to deal with surprise.	Base your identity on your ability to deal with emergent futures rather than your expertise in solving yesterday's problems.
Self-Organisation	Order and structure are created through local interaction but may not be apparent at a local level.	Develop relationships (one's own and others'), treat conversation as collective improvisation with emergent insights.	Ground your identity in relationships and help others to do the same, appreciate identities in context.
Emergence	Systems' dynamics change over time and are history dependent.	Re-arrange spatial and temporal relationships to allow the possibility of new elements and new systems.	Value collective identities and help others do the same; treat trust, freedom, and relationships as emergent.
Co-Evolution	Systems of systems make mutual adjustments.	Adapt to the world as the world is adapting to you; scan question, assess; think across levels.	Appreciate interdependence and surprises; they are the essence of CAS in which we live.

(Lanham et al., 2016, p. 58)