TOOLS FOR COMMUNITY – IVAN ILLICH'S LEGACY

ABSTRACT

Although it is forty years since Ivan Illich published Tools for Conviviality, the word "convivial" retains an appeal conjuring up liveliness, sociability and, in this age of economic uncertainty, optimism. But in an era of co-creation and co-production the word "tools" has attracted greater attention, heralding Illich is due for regeneration. Superficially, the rise of technologies like Facebook and smartphones signal Illich's convivial tools have arrived, giving creativity to a mass audience. This paper questions whether this is so by revisiting Illich's critique of capitalism and its institutions, particularly education, and examining claims that we have indeed built tools of conviviality. It seeks to reframe convivial tools and the democratization of education by looking at developments beyond digital technology to include design strategy linked to community challenges. The opportunity is taken to re-contextualise Illich's ideas on de-schooling by providing models and a case-study exemplar whilst raising issues for design education.

Keywords
Tools, Craft, Design, Community

INTRODUCTION

Thinking Conviviality

Called an "archaeologist of ideas", and despite rising rapidly to fame in the 1970s with his critique of modernisation and the corrupting impact of institutions, from the 1980s on Illich became something of a forgotten figure. Nevertheless, many commentators such as Gajardo (1994) contend that he has continuing relevance for informal education and lifelong learning, while for others Illich's lasting contribution is a dissection of institutions and a demonstration of their corruption (Hoinacki L. & Mitcham, 2002); institutions like schooling (and medicine) that had a perceived tendency to end up working in ways that reversed its original purpose. Later Illich was to explore gender, literacy and pain, his work attracting criticism from both the left and right. Nevertheless, foremost amongst his contemporary protagonists, think-tanker Charles Leadbeater has described how Illich recognized that as people came to depend more and more on the expert knowledge of professionals they lost faith in their own ability to act. Leadbeater sees Illich's solution – for people to spend less time as consumers and more as creators of their own well-being – as supporting his own theories on the value of collaborative creativity, co-production and education. In his co-created book We-Think (2009) Leadbeater widely references Ilich's writings on convivial tools and deschooling and puts forward the collective self-help of We-Think as an attempt to realize Illich's ideals.

Rightly, Leadbeater argues that the culture the internet is creating is an invitation to connect with other people with whom we can share, exchange and create new knowledge and ideas. This is, according to Leadbeater, in stark contrast to the centralized organization and culture of mass industrialization and consumption of the last century. Clearly, this laterally structured, free association of people and ideas succeeds for Leadbeater, who has worked around the world with like-minded people on projects including the dissemination of educational examples that reinvent and transform schools (2010). He is also an early adopter of design strategy and design thinking and has spawned many neologisms, including the concept of the "prosumer" – the hybrid of consumer and producer - citing the user-driven development of the mountain bike as an example of "prosumption"; a co-designed solution to the problem of finding bikes to ride on rough trails (2005).

However, is this a genuine counter strategy to the way in which Illich saw elite groups creating economic growth at the expense of human flourishing?

By tools, Illich meant physical devices, mental constructs and social forms, arguing for the creation of convivial, rather than manipulative institutions, and seeing conviviality as the opposite of industrial productivity. Illich was prescient in his view that people needed tools to work with rather than tools that worked for them. According to Illich, people required technology to maximize their individual capabilities rather than become more "well-programmed energy slaves" (1973). In order to avert what he saw as a world-wide crisis occasioned by the failure of capitalism, Illich envisioned a convivial society that guaranteed each person free access to the tools of the community. The anxiety that people were becoming enslaved to machines has a contemporary resonance. Technology writers like Carr (2010) believe that contemporary machines are changing the way we think, constraining our attention spans and limiting our ability for reflectivity, while neuroscientist Greenfield (2003) has argued that such machines are altering the structure of our brains. And, former artificial intelligence expert Lanier has created the term "digital Maoism" to describe how the internet has become inimical to individual creativity (2010). This wave of scepticism has been raised by Appleyard (2011) as contradictory evidence to the unprecedented emergence of products like electronic pads and books, smartphones and online services like Amazon, and how, ostensibly, such gadgetry represents Illich's convivial tools.

At the same time, an event like the recent failure of the international banking system and the imposition of technocratic solutions might appear to validate Illich's critique of capitalist institutions and his case for "convivial reconstruction" in which he outlines the need to set out limits to growth that includes the service sector as well as industrial productivity. This was predicated upon his recognition of the growing gap between rich and poor, both within and among countries; more depletion of the earth's resources; more dehumanizing work and addictive consumption of all kinds; the loss of identity; increased anxiety and loneliness among elites and disorientation among the majority; and a growing police and military presence. Contemporary developments ranging across such diverse

issues as: climate change; the Occupy movement; crisis in the Eurozone; high suicide rates amongst Chinese factory workers; the growth of surveillance systems; civil unrest; and the increasing instrumentalisation of learning systems in parallel with a general dissatisfaction with formal education, might be construed as authenticating Illich's exposition of forty years ago and the need for convivial, more easy-to-use tools coupled with the "political inversion" of major institutions to create new structures that are more conducive to intercourse both between people and between people and their environments (Illich I. and Verne E. 1976).

RE-CRAFTING ILLICH"S TOOLS

To Illich a tool meant systems and processes as well as machines and physical devices, and central to his idea of conviviality was their equitability. Earlier, Marshall McLuhan (1964) had described tools as extensions: "We shape our tools and thereafter our tools shape us." In McLuhan's view the insurgent technologies were giving rise to new structures of feeling and thought and new manners of perception. Although this was focussed on the development of new media, particularly television, and whilst McLuhan did see these technologies rather symbolically as systems, he was primarily concerned with their subliminal influence and the effects of alienation. Nowadays the word "tool" has become associated with the desire by leading thinkers to return to meaningful labour, for example, as promoted by Crawford (2010) and his exhortation to get one's hands dirty. Similarly, De Bouton's (2009) exploration of what constitutes worthwhile work and Sennet's socio-historical argument that performing a job well separates man from other species.

Running through these critiques, and this is important for art and design education, is the concept of craft, whose language Frayling (2011) has identified as being hijacked by business world marketeers - words like "hand-made", "hand finished", "palettes", "templates" and, of course, "tools" and "toolboxes". Although in the UK craft has been overshadowed by the recent focus on the creative industries and digital technologies and in Higher Education expensive human and material resources have been prejudicial to the sustainability of craft-based courses, arguments have been made based on craft's conviviality. In other words, the passing on of knowledge and skill though social networking might be seen as an advance on the tradition of craft which has been defined as the accumulation and transmission of expertise through social interaction (MacDonald, 2008). Instead of craft's demise, on the contrary, it has merely migrated to other regions of human enterprise, for example, in the delicate form of skilled co-operation that once produced a cathedral that now co-creates the Linux software system, which, for Sennett, is the work of a community of craftsmen. Misappropriated or not, tools are once again fashionable and are being employed in the debate about sociability (conviviality) that is quite distinct from the vicissitudes of the internet. And, inseparable from craft, hand tools, as Illich proselytised, are intrinsic to social relationships (1973 p.34).

Although Illich did not lay down an "engineering manual" for either convivial institutions or tools, his idea that they work through social interaction rather than service delivery, alongside his advocacy that access to resources should be available any time anywhere as well as enabling the skills to learn from them, does at least afford some principles. Much of this would seem to be contiguous with the rise of Web2.0 technology, its collaborative egalitarianism apparently confirming the *digerati's* claims on Illich. At the same time, Illich's harking back to more communal, flatter systems of organisation would appear to connect with the web's revitalisation of pre-industrial modes of collective organising, such as the mobilisation of peer to peer networking that is accelerating ecological shifts and changes in behaviour encouraged by the web's Pro Am, do-it yourself ethic.

Neither did Illich advance a political strategy, believing that it would detract from the core of his argument. At the time he argued that no government could restructure society along convivial lines as the mangers of the major tools, be they nations, parties or professions, held power. Furthermore, Illich believed that the new managerial class held and operated power no matter who lived under the illusion that they owned the tools. New tools, he argued, could provide new options but he restricted himself to a few structural criteria within which the retooling of society might be achieved. In a prescient section (1973 pp.30-31) Illich described how within the economics applicable to a post-industrial and convivial society in which politically defined limits on all types of industrial growth were accepted, many received ideas would have to be re-defined. The task as he saw it was to keep the net transfer of power within bounds and would need the use of traditional, as well as new, economic devices and the expansion of the vernacular and its link to the commons (Illich, 1981).

BOOSTING THE VERNACULAR
Whilst there is evidence that digital technology has boosted the idea of the vernacular and commons, and reshaped its connection to craft and community, this has to be distinguished from the cyber-boosterism that prophesies global connectivity, and which has been used to argue the arrival of Illich's convivial tools. From the Arab Spring and the role of the technology as a tool of revolution to claims that the assembled crowd of the internet is capable of finding new solutions to old problems (Surowiecki, 2004), it would appear that this wave of cyber-boosting represents tools for conviviality as envisaged by Illich. However, as Appleyard has indicated, much of this boosterism should be seen for what it is - gadget advertising underpinning a system that is dependent upon linking American design and technology with Chinese manufacture. This is a far cry from folk. Indeed, there is a sceptical counter-wave that ranges from Morozov's (2011) scholarly rebuttal of the political claims of the boosters to sociologist Sherry Turkle's (2011) concerns about the way gadget makers justify taking over the lives of children, and chillingly, providing evidence that connectivity for children can become a new form of exclusion and loneliness.

By contrast, central to Illich's ideas about convivial tools was the "vernacular domain", the realm of everyday life in which people create and negotiate their own sense of things. In a chapter on Illich looking at the wider economic context, Schroyer (2009) depicts the vernacular space as the sensibility and rootedness that emerges from shaping one's own space within the idea of the commons and local-regional reciprocity, and is central to those places and spaces where people are struggling to achieve regeneration and social restorations against the forces of economic globalization. This relates to Leadsbeater's promulgation of the commons (2008 pp.51-59). In that context, like Schroyer, he recognizes the efficacy of a bounded commons whilst suggesting that large, open communities can sustain a commons if broken down into smaller units, particularly if they are not finite resources like woods or fields but knowledge and ideas. Likewise Sennet (2008 pp.51-52) believes that craftsmanship joins skill and community, citing Linux programmers as one example. And, according to Leadbeater, the social approach to creativity encouraged by the web, is reviving one of creativity's oldest forms – folk – by empowering a mass of amateurs to create and share content. In this context, by "folk" Leadbeater means the wave of digitally enabled folk culture representing an antidote to the plastic, contrived culture of mainstream television and advertising. This is the world of co-creation, co-production and, importantly, co-design, which has become inexorably related to design thinking and citizen involvement. It is these processes, which exemplify convivial tools, offering innovative ways of problem solving, opening up civic engagement and providing strategies for systemic change. What is key is that they can be supported by new technology platforms not necessarily driven by them.

DESIGN AND CONVIVIAL RECONSTRUCTION

Globally, there has been recently a growing interest in the application of design methods and design thinking to social, economic, political and educational challenges. Wikipedia, in its definition of design thinking, describes design" as the "transformation of existing conditions into preferred ones". Design thinking is, then, usefully linked to an improved future. At the same time, the term is being used to define a way of thinking that produces transformative innovation or an empathetic, people-led approach to problem-solving. There is nothing particularly new in all of this - the thinking processes of designers have been the subject of study for over two decades. Also, the "fuzzy front end" of human-centered design has been developing rapidly since before the end of the twentieth century. More recently, and much more prominently, The UK Design Council's Red Team identified a new community of practice that was building on traditional design skills to address social and economic issues and which used the design process to enable a wide range of disciplines and stakeholders to collaborate in what it termed "Transformation Design"(Cottam H. et al 2006). Apart from underlining the effectiveness of the interdisciplinary approach that is central to Transformation Design, the Red Team also set out some challenges for designers in terms of the need to apply design thinking in broader social economic and political contexts, to collaborate fruitfully with other disciplines, and champion human-centered design.

In that sense, the need for designers to acknowledge how much they have to learn has been made by Geoff Mulgan, CEO of the UK's National Endowment for Science Technology and the Arts (2011). Mulgan has intimated that we are at a fascinating moment where design is influencing new fields contributing as never before in areas like health, welfare and housing, all of which affect community well-being. If we accept as Mulgan says that an important field of innovation – design – is itself undergoing rapid innovation, then this has huge implications for art and design education. In addition to helping students navigate their way through the ever-changing landscape of design, which now includes areas like strategic, service and transformation design as well as traditional disciplines like graphics and product design, students need to develop the new, convivial tools that can address contemporary issues. This requires a new practice – a synthesis between design and public policy and problem-solving (interestingly, this reflects the boundary breaking exemplified by Illich and his search for "convivial reconstruction"). This new practice draws upon several tools.

New Tools

The first set is to do with design anthropology. This has been developed around an adaptive use of ethnographic research that allows people in the community or users of services to visualize how their environment looks and feels. Verganti (2009) has referred to this research methodology in which collective discussion is key, as the "design discourse" – a way of understanding changes in society, culture or technology. At its heart is user-centered design, which has drawn to its banner some of the practices of socially engaged movements such as disability rights that have traditionally involved end-users to inform developments. Such cogent forms of user-participation invariably illuminate drawbacks in systems and help press for improvements. This has propelled the new narrative of co-design and led to a new area of practice - service design. Service design is the child of "Transformation Design", a process that can help design services, like products and systems, in a strategic and practical way and offers an authentic way of actively engaging people in transforming their own environment. In turn this has evolved into a global movement in public sector innovation in which design has been cast a central role in leading the process of co-creation, building on the principles of design thinking and citizen and community involvement. According to Bason (2010), in this process the latter is absolutely crucial, as people relate to the public realm much more than as users but as citizens with rights and expectations.

Fig. 1 Design Anthropology – Field Trip, Community Case-study

Another set of tools is prototyping, an activity that has gone far outside its origins as a process that prepares products for manufacturing to become a convivial tool. In the public domain a prototype can be a model of a new administrative process, a public consultation, a service journey or a policy initiative. What characterizes prototypes in this context, based on design thinking, is that they are very visual as they utilise the graphic or modelling techniques innate to designers. Indeed, the visual narratives employed by film-makers – storyboards – are also a resource that has emerged, especially to prototype scenarios for future services or plans. Technology can also come into play, with social networking and blogging used to illustrate the development of ideas, and programmes like PowerPoint used for roughs or drafts. In this context the term "roughs" is a pivotal metaphor as it is more effective to retain the rawness of the prototype so to allow greater engagement with citizens or community participants. Overall, the great advantage of such techniques is that they can facilitate community interaction and encourage co-creation. Bason (2010, pp.196-198) has described at length how even policy can be shaped using prototyping through scenario-setting and the sketching out of alternative possibilities.

Systems thinking is the next set of tools, the purpose of which is to get underneath the skin of problems and help focus on the underlying issues. Getting the questions clearly focussed is, of course, a precondition of reaching the right answers. Not least, it is a

central tenet of people involvement. For example, by permitting citizens to raise questions a better understanding can be attained of what is valuable to them, greater synergy or "joined-upness" can be pursued at an early stage and co-production possibilities can be identified. Ultimately, it is about appreciating the needs of the user or citizen. Allied to the sets of tools discussed above are the other activities essential to design – analysis, synthesis, idea generation, selection and creation. Whilst there is a growing body of research and other evidence around the efficacy of these new forms of design activity in relation to public policy and strategy (Bason C., 2010; Boyer B., 2011;), and signs that design thinking has even been subverted to "Service Design Thinking" (Stickdorn M. and Schneider J., 2010), exemplars of the application of convivial design in the service of community in a de-schooled setting are few. The following case-study attempts to demonstrate the use of such tools and at the same time illuminate the context in which they were deployed, namely, to enhance community well-being.

A CASE-STUDY IN COMMUNITY IDENTITY

Background
Mapping the Future, Designing a New Community Identity for Campbeltown**, was an intergenerational project undertaken by the author for Community Learning Development (CLD) Standards Council for Scotland (CLD 2010). It aimed to address some of the big socio-economic challenges facing Scotland's communities and, in line with this paper, sought to do this through co-design, and with community members and professionals working in collaboration as equals. Key was achieving transferable outcomes by prototyping solutions that could be applied to other communities and issues. The initiative ranged on the major issues facing rural communities generally, namely, aging, sustainability and social isolation. Also taken into account was the importance of social networks as a means of ameliorating these problems. There were three goals relating to national (Scottish) priorities:
• Raising standards of achievement in learning for adults through community-based lifelong learning opportunities incorporating the core skills of literacy, numeracy, communications, working with others, problem-solving and information communications technology (ICT).
• Engaging with young people to facilitate their personal, social and educational development and enable them to gain a voice, influence and a place in society.
• Building community capacity and influence by enabling people to develop the confidence, understanding and skills required to influence decision-making and service delivery.
Permeating this was design - the link connecting creativity and innovation in order to develop viable, user-focused outcomes.

Design Thinking – Thinking Community

The focus of the project, Campbeltown in the rural West of Scotland, like similar communities, faces the issues and skills needs identified previously. But Campbeltown has a particular challenge. It has become a centre for the manufacture of wind turbines, which, as well as changing the economic context of the town, is also a part of its changing identity. Local inhabitants have a low awareness or limited purchase on this change with a consequent loss of local identity and social confidence. Creative practitioners and local people came together to think through and address the challenge: "how do you create a new identity that can contribute to community well-being and individual confidence?" Young and old would work together; elders have a vast local knowledge, the young have an intuitive understanding of contemporary technology, and practitioners would bring insights from the design sector. Through structured workshops a new identity would be created for the town that could be communicated on a variety of media platforms: graphic, screen, mobile, web and social networking sites. Cultural and industrial heritage will be interconnected with contemporary technology and different age groups would learn to appreciate each other's assets. Also, the identified skills needs would be addressed through an innovative methodology. All of the stages of the process and the knowledge generated would be harvested for dissemination to similar communities and contexts. Panel, a creative practice with wide experience in design and community projects, worked with the author to design and deliver the workshops. In addition, the workshops provided a platform for intergenerational learning through the sharing of knowledge across a range of physical and digital media. Creative approaches were utilised to develop technological fluency within intergenerational communities. The project sought to find ways to encourage skills development and digital engagement specifically for the older generation and encourage exchange of knowledge with the younger generation.

Fig 2. Journey Maps co-created by community participants

Design Anthropology

The participants, whose ages ranged from 12 to 60+ years, were invited to create a new map for Campbeltown that would be formulated by layering each of their own personal journey maps. The map would be presented online and could exist as one or all of the following: Blog site, Facebook, Twitter, You tube, Geo tags (google earth), Vimeo, podcasts. The map would contain: Journeys, Photographs and Video (past and present), Stories, Memories and Soundscapes. This information was collected and documented using accessible technology such as mobile phones, MP3 players and digital cameras. The main focus of the workshop was to create a new map for Campbeltown based on a series of structured fieldtrips. Each participant was invited to document their own personal journey of Campbeltown by developing a series of questions and tasks and responding to a specially designed map – created with the help the workshop leaders. The process of researching and making the map allowed the participants to gain a positive understanding of Campbeltown's changing industrial and social heritage. The workshop culminated in an informal event designed to celebrate a positive identity for the town.

Each participant was asked to complete a 'profile card' and a 'journey map' The 'profile card' contained the following information: a photograph of the participant; name; age; where they lived; and what they liked about Campbelltown. The 'journey map' had two strands: Physical Networking questions; Where do you go? What do you do? There were also Social Networking questions; Are you part of a social networking site? Which one?

Who are your friends? Where do they live? In addition, each participant was asked to contribute four photographs responding to the following themes: My favourite place when I was young; My favourite place now; Changing Campbeltown; and Campbeltown and me. They were also invited to submit one object that they felt represented the identity of Campbeltown to them. This allowed the participants to begin thinking about their journeys around the town and the overall theme of identity and place.

Prototyping

Archive film footage and archive photography, together with the participants' own photographs and objects, kick-started a discussion about the heritage of Campbelltown, its landmarks, its industry and its future. A group discussion (design discourse) followed to formulate a series of questions that the participants felt reflected the identity of their place. The participants divided into small intergenerational groups and each group was invited to consider the questions they had identified and discuss these. The workshop leaders then arranged for informal interviews of stories and memories to take place within the groups, which were recorded to become a layer of content for the map. Each participant was then given his or her personal journey map of Campbeltown and invited go out and plot the journey of "where they go" and "what they do". They were asked to document and collect information, draw directly onto their map, photograph, film or audio record responses to key personal places and landmarks. They used a camera, mobile phone or MP3 player to collect the information digitally. By the end of the session each participant amassed a collection of digital information about the town – this information formed their personal map – prototypes for the dissemination stage.

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Systems Thinking
As a group the participants reviewed and edited the physical and digital material they collected. The group decided together how best to present the material as an online resource as well at the launch event. The workshop leaders facilitated this element of the workshop, however the participants drove the content and final format or outcomes. The workshop leaders encouraged discussion about how Campbeltown could best be represented through new technologies and online social networking. The participants and workshop leaders worked together to finalise arrangements for the event. Participants' friends and family and other community members were invited to attend the screening and the mini-exhibition of "Mapping the Future". The exhibition contained the large-scale map with collected stories, memories, photographs, film and objects. The online map was also launched. During the event there was an opportunity for guests to upload their own memories and stories to the online resource and add to the physical map by pinning special memory tags to the map.

Activity 3

Screening the Scottish Screen Archive and the films and photographs brought in by group

Fig 3. Prototyping: Campbeltown case-study

Summary

Over and above its demonstration of the effect of the convergence of design and convivial tools, it is believed that harvesting the learning from the project generally, based on the reflection of all who took part, may also be of practical value to other community settings. This ranged from the customary problems of time-planning, to familiarity with digital technology, to sustainability. For example, reducing and intensifying sessions to secure the participation of younger participants, so eliminating conflicts with daytime schooling commitments, emerged from the evaluation. Likewise the theme of intergenerational learning centred on digital technologies did encounter some difficulties as participants were at different stages of development; a solution might be to develop a more differentiated learning strategy to cope with differing levels of ability by adopting a more intensive hands-on, demonstrative approach to technology. It was also thought that the workshop's focus on the future could have been further developed; for example, the workshop could be expanded to create maps based on future projections to better engage participants in scenario-setting and planning. As always, user-needs could be more fully addressed with, for instance, further research into the demographic profile of the workshop participants, whilst helping embed the project and its outcome into the community in a sustainable way.

Nevertheless, the project did achieve its objective of promoting interaction between older and younger participants – a perennial issue at the heart of sustaining many communities – with design as the convivial linkage. In terms of design discourse there was a balanced discussion and debate based on shared experiences, storytelling and pictorial narratives. At the same time visualising these narratives through digital technology and social media aided design anthropology and provided material for prototyping. In turn, this facilitated Design thinking and design methods such as scenario planning and stimulated discussion of a future identity for the town. Not least, being able to design a climactic event for the project - the celebratory exhibition and dissemination to the wider community – also represented a very authentic way of evaluating the outcomes. Indeed, as evidence of its sustainability, the project continues, branching out in new directions and with community participation at the forefront.

CONCLUSION

Illich has been found to have a continuing relevance for community and lifelong learning, particularly where this is de-schooled or beyond the boundaries of the formal system. Whilst Illich's idea of conviviality and creative intercourse between people has a resonance with the web's emergent culture of sharing and an ethos of collective self-help, it has been found that extending the concept of convivial tools to design as an empowering process within community settings may have greater cogency than focussing solely on the perceived virtues of digital technology. In addition, Illich allows us to re-think craft alongside the renewed interest in tools and making, and to re-locate the contemporary debate about craft's sustainability as it migrates to other areas of society and economy. Not least, this reconstruction connects craft to co-creation and co-production in everyday life and, thus, to design in its social problem-solving capacity. Along with the models included in this paper, the Campbeltown exemplar offers a case-study of the democratisation of design to support community well-being. In a sense, this case-study models "community tools" which can enable systemic change, as co-creation ties design thinking and people involvement tools together in a joint process. In other words, Illich's Tools for Conviviality, recontextualised, can enable people to create and negotiate meaning and become authors of their own narratives.

All of this has implications for creative education. The more experimental, challenging, people-centred and tangible nature of design processes must become a part of the core curriculum not just of art and design students but managers in the public and private sectors, especially the former. But design and design thinking without craft and its social transmission of skill, is just thinking. And craft, re-defined, with its admission of folk, vernacular and the commons has been found to be part of a new narrative, a programme for new tools that has conviviality at its head. This paper has proposed that art and design has much to offer that quest, especially design in its strategic, problem-solving mode, and its extension into community tools might provide the educational reconstruction advanced by Illich four decades ago.

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