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Mass-participation Architecture: Social Media and the Decentralisation of Architectural Agency as a Commercial Imperative

Alexander Lorimer

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M A S S – P A R T I C I P A T I O N

A R C H I T E C T U R E

Social Media and the Decentralisation of Architectural Agency as a Commercial Imperative

Research Masters degree

in Architecture

By Alexander O. D. Lorimer

September 2015

C O P Y W R I G H T S T A T E M E N T

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RESEARCH DEGREES WITH PLYMOUTH UNIVERSITY

MASS–PARTICIPATION ARCHITECTURE

Social Media and the Decentralisation of Architectural Agency as a Commercial Imperative

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A C K N O W L E D G E M E N T S

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A U T H O R ' S D E C L A R A T I O N

At no time during the registration for the Research Masters degree in Architecture has the author been registered for any other University award without prior agreement of the Graduate Sub-Committee.

Work submitted for this research degree at the Plymouth University has not formed part of any other degree either at Plymouth University or at another establishment.

A programme of advanced study was undertaken, which included the taught modules ARCH 561 and MARE 522. Seminars have also been attended, and several articles for publication and an expenses paid (travel, dinner, accommodation) presentation have also been prepared over the course of study.

Seminars:

Culture Theory Space series, including talks from Alessandro Aurigi (10th October 2013, Plymouth University) and Fran Tonkiss (28th November 2013, Plymouth University)

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Alexander Lorimer, 'Anticipate or Participate', *Interiors & Sources*, May (2014), pp. 41 - 2

Alexander Lorimer, 'Social Media and the Minimum Viable Brand-scape', *Design Intelligence*, May (2014), pp. 32 - 6

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Mass-participation Architecture:

Social Media and the Decentralisation of Architectural Agency as a Commercial Imperative

A B S T R A C T

A key problem in the field of architecture and urban planning since the 1960s has been the marginal role played by the general public in directly shaping significant aspects of the built environment. This thesis draws on theories around participatory planning, and in particular, the seminal 1969 publication 'Non-plan: An Experiment in Freedom'. Non-plan suggested the potential of digital technology to facilitate self-organising public participation in architectural design and urban planning, while also taking inspiration from consumer-responsive activities across commercial disciplines. Now, half a century later, advancing web-technologies are beginning to facilitate mass-participatory design as a commercial imperative, and nowhere is this trend more visible or revealing than in the development of consumer products. The aim of this thesis is therefore to use these developments in the consumer goods industry to investigate the implications and consequences of significantly decentralising architectural design agency through the use of social media.

The thesis method is to undertake a comparative study of both the design disciplines of commercial architecture and consumer goods. Commercial architecture has inherited the selling imperative of the consumer goods industry; and, in this thesis, the commercial imperative towards mass-participatory consumer product design acts as a basis for a

contemporary evaluation of architecture's Non-plan theory. Throughout the research chapters interview content from notable architectural figures, as well as empirical exploration of mass-participatory design platforms, is combined with participatory planning theory and up-to-date information from relevant business and technology periodicals. Establishing a series of political and economic hurdles, as well as advantages to the emergence of mass-participation architecture, it is concluded that Non-plan's free-market concept will come to present an increasingly viable approach to the practice of architectural design; given appropriate regulatory conditions, and against the backdrop of the rapidly developing culture and technologies encompassed by social media. In this context it is argued that architects will find themselves acting less as social interpreters, but more as stimulators, mediators and coordinators of a significantly larger, more insightful, and profoundly productive collective; one that is composed of participants from the general public.

By Alexander Owen David Lorimer

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0.0

The overall aim of this thesis is to explore how web-based mass-participatory design might offer the potential to alter the typical roles and relationships between the design agents of retail architecture and commercial urban development. In order to do so, it will use the consumer goods industry as a case for inductive reasoning, paying particular attention to the implications and consequences of decentralising design agency through social media. 'Decentralisation' will be contrasted against the concept of 'centralisation', with the former referring to a dispersal of active agency in the process of design across a broader range of individuals, and the latter referring to the concentration of design agency with a smaller group. The term 'social media' refers to the web-based facilitation of information exchange within virtually networked communities, and 'mass-participatory design' is a phrase that is used to denote the application of social media to facilitate large-scale and decentralised public participation (hundreds to thousands or more individuals, self-organising in a process of design as opposed to being directed by a central coordinator).

The capacity to effectively drive this kind of interaction is largely a contemporary development, with significant examples emerging around the turn of the 21st century (a relatively simple and well-known case being Wikipedia, launched in 2001).[1] However the aspiration to facilitate active public participation in design and decision-making has been a notable topic of architectural literature from the mid-20th century. Since that time the lack of genuine participation has remained a subject of significant criticism and debate. As

[1] Joseph Reagle, *Good Faith Collaboration: The Culture of Wikipedia* (Cambridge, MA: MIT Press, 2010), p. 43.

described by the architectural academics Peter Blundell Jones, Doina Petrescu and Jeremy Till, this has been fueled by an understanding of public participation as a vital element 'if people are to feel a sense of belonging to the world in which they live.'[2] These authors describe the contemporary practice of participation in architectural design as frequently 'token' – a tick-box exercise, 'bringing a degree of worthiness to the architectural process without really transforming it.'[3] Little has changed in this respect since the 1960s,[4] and the established social motive behind participatory planning has fallen short of sufficiently affecting transformative change in public space.

There is also a distinct commercial motive, and in contexts such as retail architecture the needs of the client (as financer) necessarily revolve around acquiring a return on investment, fundamentally derived from continuous consumer attraction, fulfillment and consequent spending (under competitive circumstances). In this sense, consumers collectively bear capacity to judge the validity and even override certain preconceived design concepts held by the client or architect. This has formed the basis of a commercial imperative towards consumer participation, which has become most apparent in recent years in other contexts and spheres, particularly the consumer goods industry. Within the last decade a growing number of influential product manufacturers have launched successful web-based mass-participatory design platforms that have attracted open collaboration communities of millions of individuals. Such systems utilise active, self-

[2] Peter Blundell Jones, Doina Petrescu, Jeremy Till, *Architecture and Participation* (Oxon and New York: Taylor & Francis Group, 2005), p. xiii.
[3] *Ibid*, p. xii.
[4] Paul Barker, 'Non-plan Revisited: or the Real Way Cities Grow' in *Journal of Design History*, Vol. 12, No. 2 (1999), p. 95.

organising consumer design input at a large scale, in order to anticipate the needs and preferences of the wider market.[5]

The commercial incentive for participation offers an alternative basis for interrogating the political complexities of urban development while conceivably acting as a practical bridge between democratic gesture and meaningful intent. The goal of this investigation is to use the developments in the consumer goods industry as a case for inductive reasoning for the architectural field, regarding the implications and consequences of significantly decentralising design agency through social media. To this extent this thesis will critically evaluate, in the contemporary context of web-based mass-participation, the appropriateness of the self-organisation, free-market concept of Non-plan to the design of commercial architecture.

Context: Theories of Participatory Planning and Architecture
0.1

'Non-plan: An Experiment in Freedom' is a seminal text (first published in 1969 in *New Society* magazine)[6] that underpins a vital body of critical argument with which to approach the commercial, political and social implications of significantly decentralising architectural agency. Essentially this early article's salient points provide a theoretical link to the contemporary activities of web-based mass-participatory practice in the consumer goods

[5] Josh Dean, 'Is This the World's Most Creative Manufacturer', *Inc Magazine* (2013), <http://www.inc.com/magazine/201310/josh-dean/is-quirky-the-worlds-most-creative-manufacturer.html> [accessed 29 December 2013].
[6] Paul Barker, Reyner Banham, Peter Hall, Cedric Price, 'Non-plan: An Experiment in Freedom', in *New Society*, 20 March 1969.

industry. Authored by Paul Barker, Reyner Banham, Peter Hall and Cedric Price, the subheading of the 1969 Non-plan article read:

> Town-and-county planning has today become an unquestioned shibboleth. Yet few of its procedures or value judgments have any sound basis, except delay. Why not have the courage, where practical, to let people shape their own environment?[7]

Non-plan's 'experiment in freedom' fundamentally suggested the removal of centralised planning regulation in favour of a free-market approach to urban development; it was regarded by many professionals as an 'outrageous' and inappropriate reaction to the centralised planning establishment.[8] The authors were concerned about the 'we-know-best' imposition of aesthetic choices, and while they have inspired various isolated deregulation initiatives over the years,[9] the balance of power between the general public and centralised decision-makers has not been fundamentally altered. Non-plan highlights a legitimate and difficult issue, the centralisation of power to alter public space, but the solution it proposed appeared, to many, as a backwards step that would only exacerbate matters.[10]

The authors' inspiration came from the commercial disciplines of broadcasting and fashion, both regarded as unsuppressed and naturally responsive to consumer culture. But while

[7] *Ibid.*
[8] Paul Barker, 'Thinking the Unthinkable', in *Non-Plan: Essays on Freedom Participation and Change in Modern Architecture and Urbanism,* ed. by Jonathan Hughes, Simon Sadler (USA, Oxford: Elsevier ltd. 2000), p. 5.
[9] Jonathan Hughes, 'Non-Planning for a Change', in *Mute*, Vol. 1, No. 21 (2001), <http://www.metamute.org/editorial/articles/non-planning-change> [accessed 24 February 2015]
[10] Ben Franks, 'New Right/New Left: An Alternative Experiment in Freedom', in Jonathan Hughes and Simon Sadler (eds), *Non-Plan: Essays on Freedom Participation and Change in Modern Architecture and Urbanism,* ed. (USA, Oxford: Elsevier ltd. 2000), p. 37.

capitalism was regarded by the Non-Planners as driving 'the living architecture of our age,'[11] having contrasted commercial landmarks with regulated preservation efforts in old cities, this ideology can easily be reframed. Ben Franks, for example, in his 2000 Non-plan essay, 'New Right / New Left', writes (rather satirically) that 'big business – in the form of petro-chemical multinationals – should be given the freedom to build their gas-stations in the locations they desired.'[12] The concept has therefore been criticised for underestimating capitalist and shortsighted self-interest, as in these instances members of the public can of course find themselves marginalised by capitalist forces, which tend to be class dominated rather than value-neutral.[13] This would certainly undermine Non-plan's core values of citizen empowerment, but a closer reading of Banham's section of the original 1969 essay clarifies matters:

> Any advocate of Non-Plan is sure to be misrepresented […] The need to make elaborate and long-term plans is as pressing for the individual firm, as it is for the central government. But we are arguing that the word planning itself is misused; that it has also been used for the imposition of certain physical arrangements, based on value judgments or prejudices.[14]

Banham indeed goes on to praise commercial architecture, but this appreciation arises only from a discussion of a natural economic receptiveness to consumer needs. The idea of Non-plan was intended to shock when it was first published, as a means of grabbing attention,[15] and the title can be seen as a result of such polemical intentions. But instead of standing for

[11] Barker, Banham, Hall, Price, p. 443.
[12] Franks, p. 35.
[13] *Ibid*, p. 39.
[14] Barker, Banham, Hall, Price, p. 442.
[15] Cedric Price. 'Architect for Life', in *Open Democracy*, (2003), <https://www.opendemocracy.net/node/1464> [accessed 24 March 2015].

unorganised anarchy (as it could be confused) the essential idea of Non-plan was most clearly expressed merely as a rejection of imposed subjective judgments. In fact, counter to the 'Non-plan' title, 'planning' is actually supported (but only as a fundamentally responsive act). In Reyner Banhams final section of the essay, 'Spontaneity and Space', he suggested that 'frameworks for decision, within which as much objective information as possible can be fitted'[16] should become the mode by which planning takes place. But as the Non-planners acknowledged, 'even to talk of a "general framework" is difficult.'[17]

In a 2005 article entitled 'Public Participation in Planning: An Intellectual History'[18] Marcus Lane organised a series of historically distinct concepts, which can be argued as approaching but not yet obtaining a realisation of Banham's objective 'frameworks for decision'. The first concept was 'blueprint planning' which, according to the urban planner and Non-plan author Peter Hall, prevailed up until the 1960s.[19] Here the planner acted as 'omniscient ruler […] without interference or question'[20] while the notion of a participatory democracy was absent. Fundamentally opposed to Non-plan's dismissal of subjective judgments, blueprint planning was criticised in its over-simplification and assumptions of predictability about the preferences and behaviours of end-users.[21]

[16] Barker, Banham, Hall, Price, p. 442.
[17] *Ibid*.
[18] Marcus Lane, 'Public Participation in Planning: An Intellectual History', in *Australian Geographer*, Vol. 36, No. 3 (2005), pp. 283-99.
[19] Peter Hall, *Urban and regional planning* (London: Routledge, 1992), p. 6.
[20] *Ibid*, p.61.
[21] Andreas Faludi, *Planning Theory* (Oxford: Pergamon Press, 1973), pp. 33-4.

'Systems planning' is regarded as having followed, usurping blueprint planning in the 1960s while allowing for a notion (albeit a 'tokenistic' one) of participation in the planning process.[22] Public consultation became an officially sanctioned activity in Britain in 1968, and subsequently The Skeffington Committee was appointed to find 'the best methods, including publicity, of securing the participation of the public at the formative stages in the making of development plans for their area.'[23] As a result, systematic consultation emerged, in which urban planners facilitated public debate over plans; but this was still heavily criticised as constraining 'participants' to providing 'commentary on the goals of planning'[24] and to being 'educated' 'from the planners perspective.'[25] This practice of public consultation has been described as an 'empty ritual', with no redistribution of the 'real power needed to affect the outcomes of the process.'[26] Such shortfalls have been attributed to a vestige from blueprint planning in which 'unitary public interest'[27] is assumed, limiting the extent to which information from public participation is both sought and applied. As Lane states,

> The assumption that society is homogenous means that participation is only required to validate and legitimise the goals of planning. Finally, the unitary interest tends to de-legitimise and stigmatise objections to planning proposals as parochial.[28]

[22] Lane, p. 289.
[23] The Skeffington Committee, *People and Planning*, (London: HMSO., 1969), p. 1.
[24] Lane, p. 290.
[25] Peter Shapely, 'Introduction', in *People and Planning* (Abingdon, Oxon, 2014), p. 11.
[26] *Ibid.*
[27] Lane, p. 290.
[28] *Ibid.*

Charles Lindblom notably departed from this way of thinking in his 'Science of 'Muddling Through''.[29] Lindblom recognised (as did the Non-planners) that making 'many statements' can be superior to making fewer 'big statements'[30] in terms of design decisions. The Non-planners used these opposing descriptions in their 1969 article to compare the short-lived commercial exploitation of quickly changing trends in consumer culture, to the larger but less responsive statements of urban planners. Lindblom also made the case that continually and incrementally adjusting plans would help avoid inevitable mistakes brought about through 'a futile attempt at superhuman comprehensiveness.'[31] He recognised that, along with the inadequacy of initial information, the range of variables to be considered in planning were too great to be addressed by any human intellect. The incrementalist model that he advocated instead would solve planning problems by 'a process of successive approximation',[32] where intentionally small practical steps would be made over a long period of time towards desired objectives. These objectives are recognised as reactive and potentially changing under reconsideration. In this sense incrementalist theory acknowledges a plurality of public interests, where significant developments result from the 'push and tug'[33] of different stakeholders over time. As Lane describes, incrementalist planning 'provides a mechanism for incorporation (however informally) of other actors'.[34] This still relies heavily on the planner's initial intuition, while the role of the public is more reactive than inclusive in any formally defined decision-making framework.

[29] Charles Lindblom, 'The Science of "Muddling Through', in *Public Administration Review,* Vol. 19, No. 2 (1959).
[30] Barker, Banham, Hall, Price, p. 442.
[31] Lindblom, p. 88.
[32] *Ibid,* p. 86.
[33] Lane, p. 291.
[34] *Ibid.*

Nevertheless, the appreciation of a heterogeneous society spurred a series of alternative approaches to planning by the 1970s, which have been described as belonging to the 'contemporary era' of planning thought. This is characterised by a view of 'participation as a fundamental element of planning and decision-making' rather than just 'a decision-making adjunct.'[35] In the context of greater participatory intent, the real difficulty in achieving the Non-plan aspiration of objective 'frameworks for decision' becomes starkly apparent. The contemporary concept of advocacy planning, as one example, is based on the understanding that there are significant inequalities in the ability of diverse and unorganised social groups to affect the outcomes of urban planning projects.[36] In order to rectify this, planners would act as advocates, seeking to 'catalyse the participation of inarticulate actors or, alternatively, advocate their interests directly.'[37] The planners' responsibility is therefore that of understanding, filtering, and channeling the apparent perspectives and needs of diverse groups within a population, to ensure plans are drawn up with their needs in mind. The influential economist Friedrich Hayek has provided a description of the inherent inadequacy of social representation over two decades before the proposition of 'advocacy planning'. In his 1945 article 'The Use of Knowledge in Society' Hayek suggested that all the societal information of relevance to planning decisions is never '"given" to a single mind which could work out the implications and can never be so given.'[38] Agreed by the Non-planners, 'the myriad needs and desires of a large population'[39] are too

[35] *Ibid*, p. 295.
[36] Donald Massiotti, 'The underlying assumptions of advocacy planning: pluralism and reform', in *Critical readings in planning theory* (New York, Pergamon Press: 1974) p. 207.
[37] Lane, p. 293.
[38] Friedrich Hayek, 'The Use of Knowledge in Society', in *The American Economic Review*, Vol. 35, No. 4 (1945), p. 519.
[39] Franks, p. 33.

dynamic and complex, as 'dispersed bits of incomplete and frequently contradictory knowledge.'[40] For Hayek this meant:

> every individual has some advantage over all others because he possesses unique information […] of which use can be made only if the decisions depending on it are left to him or are made with his active cooperation.[41]

Representative individuals can only work from their interpretations, and in this context Hayek arrived at the seemingly intractable question, '*who* is to do the planning?'[42]

In *The Ungovernable City* (1977) Douglas Yates suggests that in large municipalities the 'sheer number of groups means that competition to be heard'[43] amounts to unstructured, unstable, antagonistic interests and forces. This situation was, for Hayek, a 'problem of the utilisation of knowledge'.[44] Hayek's 1945 article suggested that, while each individual has unique and relevant knowledge, 'there still remains the problem of communicating to him such further information as he needs to fit his decisions into the whole pattern of changes.'[45] Yates presented this almost as a paradox or conundrum, where a municipality is both too centralised and hasty 'to be truly responsive to its citizenry'[46] and its citizenry too decentralised and fractured to amount to any more than 'street-fighting pluralism'. Yates stated, 'this situation points away from 'planning' and towards chaos.'[47] Hayek, on

[40] Hayek, p. 519.
[41] *Ibid*, p. 521.
[42] *Ibid*, p. 520.
[43] Douglas Yates, *The Ungovernable City: The Politics of Urban Problems and Policy Making* (Cambridge, MA: MIT Press, 1977), p. 85.
[44] Hayek, p. 519.
[45] *Ibid*, p. 525.
[46] Yates, Blurb.
[47] *Ibid*, p. 85.

the other hand, drew inspiration from an altogether different idea: that seemingly simple mechanisms could establish sophisticated order out of apparent social chaos. The economic 'price system' was proposed as an example of this, where scarcity of one raw material would provoke a natural chain of events that spreads 'throughout the whole economic system,' affecting the price and uses of that raw material and its substitutes ('and substitutes of these substitutes').[48]

> Without more than perhaps a handful of people knowing the cause, tens of thousands of people whose identity could not be ascertained by months of investigation, are made to use the material or its products more sparingly; *i.e.,* they move in the right direction.[49]

For Hayek this seemingly ordinary system was a 'marvel', and he admired an economy of knowledge where the individual participants did not need to know about more than their local interactions 'to be able to take the right action'[50] collectively. Hayek recognised that this system was not flawless, in that 'not all will hit it off so perfectly that their profit rates will always be maintained',[51] but he believed that the price system could effectively 'coordinate the separate actions of different people in the same way as subjective values help the individual to coordinate the parts of his plan.'[52] Most importantly Hayek suggested that the underlying requirement for the utilisation of knowledge was 'by no means peculiar

[48] Hayek, p. 526.
[49] *Ibid*, p. 527.
[50] *Ibid.*
[51] *Ibid.*
[52] *Ibid*, p. 524.

to economics […] and constitutes really the central theoretical problem of all social science.'[53]

In this context the Non-planners' 'frameworks for decision' necessarily demanded the dispersed knowledge of time and place of all the relevant individuals concerned; and, as Hayek asserted, only through the active cooperation of the individuals by appropriate mechanisms can beneficial use of this knowledge be made. 'We must solve it by some form of decentralisation' Hayek adamantly stated.[54]

Yet architectural design appears irreducible to succinctly defined action in the context of supply and demand; architecture is multifaceted and its meanings vary with each person, as with any cultural object. Nevertheless in a 2012 Radio 4 broadcast Mark Pagel reasoned that processes of consumer selection are analogous to the decentralised selection pressures that guide biological evolution,[55] suggesting applicability to all kinds of commercial or cultural objects; this ties back to Hayek's own theories of cultural evolution.[56] Consumers make purchases based on their own individual judgments, with an aggregate effect of driving a much larger demand chain that guides the design and production of all subsequent items in the direction of consumer preference. This amounts to push-pull incrementalism, where social forces direct objects of design but only gradually (particularly in the case of buildings, which tend to be less transient and disposable than products).

[53] *Ibid.*
[54] *Ibid.*
[55] Armand Leroi, Mark Pagel, Darwin's Tunes, BBC Radio 4, 8 August 2012, 00:06:20.
[56] Erik Angner, *The History of Hayek's Theory of Cultural Evolution* (University of Pittsburgh, Dept. of History and Philosophy of Science and Dept. of Economics, 2002), <http://institutoamagi.org/download/Angner-Erik-The-history-of-Hayeks-Theory-of-cultural-Evolution.pdf> [accessed 24 March 2015].

Critics have consequently reasoned that 'we should try to do better'[57] than to see what incrementally emerges while aspiring only to sub-optimal steps along the way.

This thesis is based on the belief that there is a need for an incrementalist push-pull mechanism that can be incorporated into a condensed, pre-established framework for decision, with potential for the all-inclusive decentralisation demanded by Hayek. The Non-planners had suggested this aspiration of inclusion for the field of architecture and urban planning in the 1960s, but a practical and formal definition of the objective 'frameworks for decision' was lacking – 'even to talk of a 'general framework'' was difficult. The authors nevertheless highlighted several developments that were of growing importance to the topic, including 'commercial exploitation'[58] or responsiveness to consumer culture, and the early emergence of digital technology in its ability to 'master vastly greater amounts of information than was hitherto thought possible.'[59]

To update the Non-planners' reference to the broadcasting industry, in recent years digitally interactive algorithms have been applied to the participatory development of music, simulating the process of evolution by consumer selection.[60] This process takes place within a condensed time-span as a predefined decision-making framework, and is largely experimental. However web-based systems that do not adhere so strictly to this biological analogy (as much as a more general push-pull incrementalism) have so far had significantly greater commercial success. In the consumer goods industry this commercial incentive has

[57] Charles Lindblom, 'Still Muddling, Not Yet Through', *Public Administration Review*, Vol. 39, No. 6 (1979), p. 517.
[58] Barker, Banham, Hall, Price, p. 442.
[59] *Ibid.*
[60] *DarwinTunes* <http://darwintunes.org/> [accessed 24 March 2015].

resulted in an explosion of web-based mass-participatory design platforms in recent years, capable of organising millions of public individuals in commercial product development processes, involving open idea submission, collective voting, shared comments, and collaborative refinement.

Research Underpinning and Questions
0.2

Such systems are applied examples of 'frameworks for decision', encompassing Hayek's decentralisation and Lindblom's incrementalist theory, where products are fine-tuned actively by a consumer population online before production takes place. These very recent developments in the design of consumer products constitute early manifestations of the systems suggested by the Non-planners almost half a century before.

This thesis therefore asks:

- What principles arising from mass-participatory practice in the consumer goods industry may be relevant to the commercial activities of urban development and architectural design?
- Furthermore, how might these principles act to influence distributions of architectural agency?

In fact, very early platforms are now even emerging with similar characteristics for the field of architectural design (such as *Stickyworld* and *BetaVille*). But now that the capacity to support such systems has arrived, with similar web-based platforms likely to progressively

emerge and develop,[61] an uncertainty arises in quite how significantly the typical roles and relationships between the different agents of commercial architecture might be altered. This leads to a further research question: could Non-plan's free-market concept be as effective in the field of architecture as it appears to be in the consumer goods industry?

This thesis attempts to fill a knowledge gap, by reevaluating the arguments of the Non-planners in the age of social media. The intention is to determine how emerging circumstances (including the widespread use of social media) might alter the long established roles and relationships between the public, professionals, and clients of architectural design; and consequently, how the public might come to exert more of a design influence in significant aspects of their urban landscape – empowered by digital technology and driven by commercial incentive.

Research Methodology
0.3

As a means of approaching these issues, the consumer goods industry will serve as a model due to its historic relationship with the design of retail architecture (which will be discussed in further detail in Chapter One) in addition to its relationship to Non-plan theory. This mercantile focus will avoid a detailed discussion of community architecture (such as public parks, neighborhood plans and housing schemes) although Chapter Two will draw a distinction between this and retail development, along with the underlying motives for gaining public participation. The reason for anchoring this investigation firmly within the

[61] I argued this in my article (written during my ResM programme of study), 'Social Media and the Minimum Viable 'Brand-scape'' in *Design Intelligence,* May 2014, p. 36. (See Publications).

area of retail architecture is because of its close relationship to the consumer goods industry and its proximity to the arguments and criticisms of Non-plan.

A certain imperative to respond to the needs of the consumers is ever present in all types of architecture, but the rigorous competitive context of retail acts to highlight this most clearly for the purpose of investigation. As will be described in greater detail in Chapter One, commercial competition both at a local, national and international level has acted as a fundamental driving force behind key developments in consumer-focused design practices over time. As with consumer products (where price and marketing also constitute areas for competition), architectural design is not the only basis by which neighbouring retailers compete. But its importance can nevertheless be significant. As explained by Jason Forbes, referring to his approach in his design of the Westfield Shopping Center in London:

> If we provide an environment which is comfortable for the customer, odds are that they're going to engage time and again in the business of retail. The longer they stay, the more likelihood they spend.[62]

Peter Coleman explained in his book *Shopping Environments: Evolution, Planning and Design*, 'The public is well aware that there is usually another center within a radius of 40-60 minutes' drive-time.'[63] He describes significant competition between neighbouring shopping environments in the UK, striving to achieve differentiation through 'core design values'[64] underpinned by increasingly detailed consumer research. This emphasis on design is less the case in the instance of discount stores, but many of these still make use of

[62] Jason Forbes, interviewed by Tom Dyckhoff, Leisure, *The Secret Life of Buildings*, Channel 4*,* 2011, 00:25:20.
[63] Peter Coleman, *Shopping Environments: Evolution, Planning and Design* (Architectural Press, Elsevier Ltd, 2006), p. 8.
[64] *Ibid,* p. 11.

consumer analytics to ensure that layout and presentation are competitively optimised,[65] balancing consumer experience with low cost. Retail architecture has inherited the selling imperative of consumer goods and, in this thesis, consumer goods conversely acts as a basis for a contemporary interrogation of architecture's Non-plan theory.

Additionally, retail development provides a catalyst for a discussion that traverses both the areas of architecture and urban development. Non-plan was expressed in 'the area we loosely call planning'[66] both at the scale of an individual building design to that of a larger region. Similarly, retail development can act both as a pivotal element in large regeneration schemes, while simultaneously constituting a distinct architectural design project. It can take the form of massive mixed use retail districts and large shopping centres, and, in other instances, smaller retail outlets and interior design schemes. It embodies an activity that is widely shared and provides the hub of attraction in urban centers, confronting the broadest range of interests and preferences both social and economic. In this sense, retail architecture facilitates an interrogation of the arguments and assumptions of Non-plan, as a theory that places faith in self-organising social forces, while also being criticised for its susceptibility to unfettered corporate interest.

[65] Roth, David. *History of Retail in 100 Objects* (London: The Store, 2013), p. 122 <http://www.retail100objects.com/History-of-retail-in-100-objects.pdf> [accessed 24 March 2015]
[66] Barker, Banham, Hall, Price, p. 442.

Consequently a comparative study, of both the design disciplines of retail architecture and consumer products, has been chosen as the overall framework for this investigation. This approach will gather insights from a related industry that is at the forefront of commercially driven, web-based, mass-participation. These relationships are depicted in Figure 1.

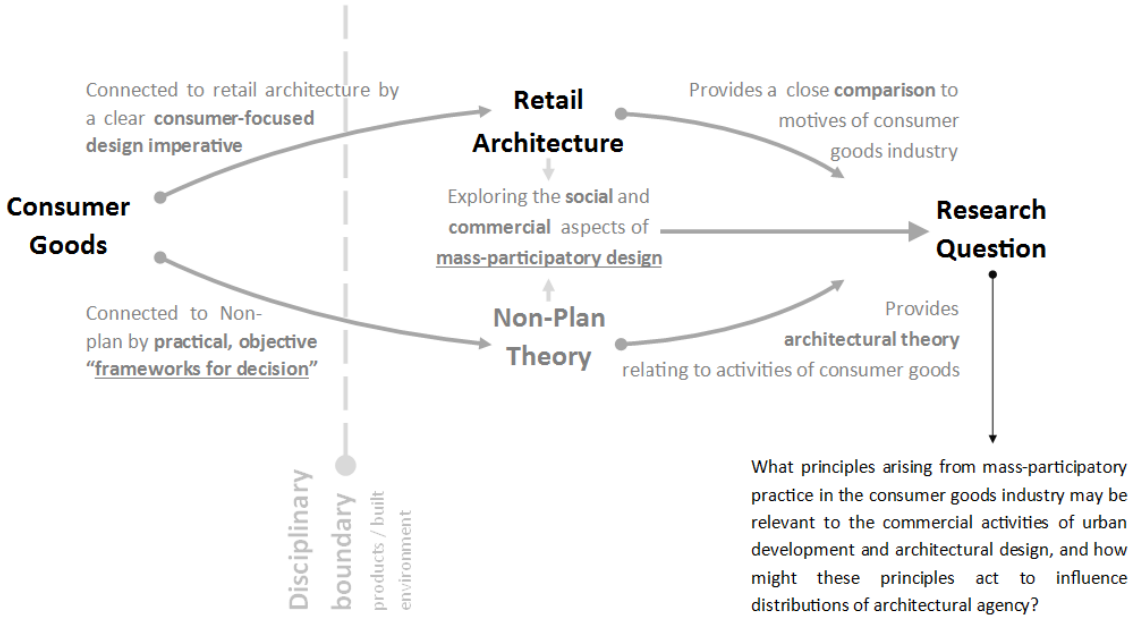

Figure 1, Framework of research investigation (own illustration)

A literature review of the history of both consumer product and retail design (with respect to consumer-focused design activities) has been used to highlight congruent development in both disciplines over time. Scholarly texts on the subject of participatory architecture and business concepts of participation provide academic theory throughout the thesis, while popular business and technology periodicals such as the *Wall Street Journal* and *Wired* provide up-to-date information in the area of social media facilitated commercial design.

In addition, live and archive exploration of mass-participatory design platforms (such as *Quirky* and *Stickyworld)* has acted as a source of empirical information. An inevitable

limitation of this research is that it is based on inference, dealing with elements of uncertainty by relying on mass-participatory design presidents that are in their early stages of development. This, in part, has informed the decision to cross-compare developments in both the architectural and product design fields, with the latter demonstrating further progress in this emerging area. Additionally, interview content from notable architectural design figures (chosen due to relevant and innovative work in the area of web-based design platforms) has provided original information in support of the critical arguments that are developed in this thesis.

The shape of the commercial architectural design field is complex, arising from discord between multiple agencies: the architects who are often driven to maintain professional authorship and recognition over the outcomes of design, the commercial interests of the clients (not necessarily indicative of broader public opinion), and the heterogonous interests that exist between members of the public. These are intersecting factors that will be explored in this thesis, accompanied by an argument that emphasises social media as a means of balancing contradictory interests while maximising the input and bargaining power of members of the public throughout the design process.

Shape of Argument
0.4

The first chapter begins with an overview of the histories of both consumer product and retail design practices, in terms of the methods that have been employed to fulfil consumer needs and preferences. Over a period of centuries, there has been a clear movement

towards decentralised, consumer-driven design in both disciplines with the consumer goods industry generally maintaining a lead in this progression. Having established this trend, the chapter discusses the recent nature of the emerging mass-participatory design imperative by identifying distinct advantages of early application in the consumer goods industry, in addition to various doubts about the commercial or architectural potential.

Chapter Two investigates leading, contemporary retail design practices. It argues that relatively conventional methods of market research remain the mode by which even the most 'innovative' practices engage with consumers, while active design agency in this commercial context remains largely centralised. Additionally, an overview of social media facilitated architectural design in general will be presented, exploring contemporary approaches to participatory architecture against the backdrop of mass-participatory consumer goods. However, both in terms of the scale or locus of design agency, notions of mass-participatory architecture will be argued as 'token gestures'.

This argument will then form the basis of Chapter Three, which explores the political context behind commercial architecture's apparent resistance to the emerging mass-participatory design imperative (mass-participatory design platforms for the architectural field have already emerged, such as *Stickyworld* and *BetaVille*, but they have so far gained little traction). This discussion is divided into three sections, each focusing on the agency of the professional designer, the client, or the public; and in each case the political context of commercial architecture is compared to that of consumer goods. Politics of consensus and the heterogeneity of public interest are critically discussed and the motives for maintaining

centralised control and architectural authorship will be explored and critically evaluated. The purpose of this chapter is therefore to pull together a discussion of the different agencies in design (their variety of interests both social and economic) and set this against the underlying theories and assumptions of Non-plan, gauging architectural applicability in the age of social media.

The conclusion will reflect upon the established conflicts between the different agencies of urban development, and the difficulty of ensuring consensual public input through a purely free-market approach. It will suggest how far social media may be capable of decentralising architectural agency through commercial imperative alone, and how this may impact on the profession, the clients and the public of commercial, architectural development.

THE EMERGENCE OF MASS–PARTICIPATORY DESIGN

1.0

'This is a fundamental change. To me it really is as revolutionary as the industrial revolution itself was' remarked Nicolas Scheele in 2000 while head of Ford Europe (interviewed by Peter Day, Global Business Correspondent for the BBC).[67] However, the focus in this discussion was not the process of mass-production (famously pioneered by Ford at the beginning of the 20th century), but mass-participation in product design, facilitated by web-based technologies. In fact a significant number of consumer goods companies now utilise the Internet for this purpose, distributing design agency to their consumers.

This transformation may be described as revolutionary, but it can also be seen as part of a long, continuous trend: a competitive, commercial imperative to better understand and cater for the needs and preferences of the customer. A series of categorical transitions further articulate this progression.

- From little to no consideration of public taste in the utilitarian consumer products produced before the 1700s (described by the design historian Penny Spark),[68] to the intuitively decorative and artistic products that followed with cheaper production methods and generally wealthier populations.[69]
- From little to no formal market research as a gauge of popular consumer taste before the 20th century,[70] to the establishment of formal research and development

[67] Nicholas Scheele, interviewed by Peter Day, 'The World Turned Upside Down', *Archive on 4*, BBC Radio 4, 12 October 2013, 00:09:57.
[68] Penny Sparke, *Design in Context* (Quarto Publishing Group, Book Sales, 1988), p. 19.
[69] *Ibid*, p. 17.
[70] Davis Dyer, Frederick Dalsell, Rowena Olegario, *Rising Tide: Lessons from 165 Years of Brand Building at Procter & Gamble*, (The Procter & Gamble Company, 2004), p. 58.

departments from the 1920s onwards (pioneered by Procter & Gamble and widely emulated).[71]

- From the 20th century 'insular' approach of Procter & Gamble with regard to active, participatory design (described by Jeff Howe in his 2008 book *Crowdsourcing),*[72] to the 21st century decentralised, mass-participatory design approach (described by MITs Frank Piller as a step beyond conventional market research).[73]

Each of these categorical transitions form part of a continuous movement that has progressively emphasised consumers[74] and pulled them closer into the design process. This progressive perspective is useful, not least to explore the historical emergence of design decentralisation, but also to reveal how closely this trend is being followed by the design practices in retail architecture.

The following four sections of this chapter will elaborate on the bullet points above. The overall congruence between developments in product and retail design will be highlighted, in addition to the persistence with which the consumer goods industry has adopted innovative consumer-focused design approaches before similar techniques emerge in the design of retail architecture. After emphasising this apparent latency the focus will progress to the currently emerging mass-participatory design imperative of consumer goods. The

[71] Lawrence Friedman, *Go To Market Strategy* (Oxford: Butterworth-Heinemann, 2002), p. 146.
[72] Jeff Howe, *Crowdsourcing: Why the Power of the Crowd is Driving the Future of Business* (Crown Business: 2008), p. 9.
[73] Frank Piller, 'Open Innovation With Customers: Co-creation at Threadless', in *A Guide to Open Innovation and Crowdsourcing*. Ed. Paul Sloane (GB: Kogan Page Limited., 2011), p. 106.
[74] It is important to make the distinction that the word consumer is being used to refer to members of the general public, and not cases where it would be reserved to refer only to the gentry of that time. The rich and powerful have always had the capacity to support embellished and elaborate objects of design, and the inclusion of such examples would only obscure the mapping of any progression as it relates to the general consumer.

remaining sections of the chapter will outline distinct advantages of mass-participatory practice, under the headings 'productivity', 'prediction' and 'promotion', along with various doubts about any commercial and architectural potential. These criticisms will be explored and contrasted against an extrapolation of the consumer-focused design trend (which would suggest a more or less mainstream emergence of mass-participatory retail design within a matter of decades). A need to delve deeper into the commercial, social and political contexts of architectural design will then be identified, to uncover whether or not significant architectural design decentralisation could conceivably take place, along with its possible implications.

Little Consideration for Consumer Taste
1.1

As the title suggests, this category describes a circumstance where little to no differentiating design input has been required to attract consumers. This is useful in mapping instances primarily before the arrival of the industrial revolution, when the general public possessed little spending power. As Spark has described in *Design in Context*;

> In an eighteenth-century village, for instance, the population produced its own food and clothing in its own homes. The wheelwrights and blacksmiths produced wooden and iron implements and vessels to forms which had evolved through the centuries from technical and economic constraints alone.[75]

In fact, it is in this century that strategic, differentiating design input to attract consumers had begun to emerge (as discussed in the following section). But at least up until this point

[75] Sparke, p. 19.

commercial competition had generally been very low, with products designed with utility in mind and very little need (if any at all) for competitive differentiation.[76]

A similar circumstance can be seen in the retail industry. It is likely that even in the 1700's the owners of general retail establishments would have been comparatively unconcerned with the strategic presentation of their internal selling environments.[77] Even openly displaying merchandise was uncommon until the 1800s. In *Visual Merchandising: The Image of Selling* Louisa Larocci describes retail operations in the early 19th century 'where goods would often be stored at the back of shops and brought out selectively to be shown to interested buyers.'[78] The 'art of selling' was regarded largely as a verbal skill with which a seller could persuade the consumer to make a purchase. Generally, little emphasis was placed on original design input to attract consumers, and this is a circumstance that was not unique to either discipline.

Intuitively Driven Design
1.2

'Intuitively driven design' is intended to describe centrally generated, differentiating design input that originates from a team of professional designers, relying on 'an instinct that allows them to sense, anticipate and give definition to shifts in public taste.'[79] In the consumer goods industry this requirement began to emerge in the 1700s, when the growing spending power of middle-class society inspired 'upward emulation'.[80] As Spark explains,

[76] *Ibid*.
[77] Roth, p. 62.
[78] Larocci, p. 2.
[79] Olga Reid, Drew Plunkett, *Detail in Contemporary Retail* (Laurence King, 2012), p. 7.
[80] Sparke, p. 17.

the new wealth of the population along with cheaper production methods brought about a desire and growing ability to follow the design trends set by the aristocracy. With sufficient demand and the means of production, a certain level of investment in aesthetic appeal had become worthwhile.[81] But as fashion and public taste at this time was fairly uniform designers and makers could be relatively sure of a growing market for their products so long as they were in an aristocratic style. John Heskett, in 'Design: A Very Short Introduction', acknowledges a circumstance where consumer demand had diversified by the mid-18th century however:

> With competition becoming fiercer as more producers with greater capacity entered markets, and with varying tastes in fashion being necessary to pique the taste of customers, a flow of new ideas was required. Academically trained artists, as the only people trained in drawing, were increasingly commissioned by manufacturers to generate concepts of form and decoration in prevailing taste.[82]

Sparke similarly describes this circumstance as emerging in the second half of the century.[83] The 1700s therefore appears to mark the beginnings of a recognisable activity of design for shifting consumer opinion and preference.

However, similarly explicit retail design activity is generally regarded as having emerged somewhat later. Excluding some exceptions, this occurred primarily in the following century – the 1800s, with the arrival of the department store that sought to provide pleasing retail

[81] *Ibid*. p. 35.
[82] John Heskett, *Design: A Very Short Introduction* (Oxford: Oxford University Press, 2002), p. 17.
[83] Sparke, p. 35.

experiences inspired by the 1851 Great Exhibition.[84] In Claire Walsh's 'The Newness of the Department Store: a View from the Eighteenth Century'[85] a case is presented which challenges this understanding of 19th century retail design origins with an argument for the 1700s. Yet, as criticised, 'Walsh's work only examined a small number of London-based boutique stores whose retail practices may not have been indicative of general patterns.'[86] It may have been the case that retailers (particularly aimed more towards the gentry) would have employed strategic retail design tactics in order to stimulate consumption in the 18th century, but it is certainly in the 19th century that this is regarded as having first become a mainstream activity for the general consumer.

Since the Great Exhibition retailers had noted the public appeal and attraction impressive environments could provide, and that additional value and profit could be derived by embedding ordinary merchandise in lavish settings.[87] Openly displaying merchandise within a strategically appealing environment is regarded as having still been a relatively new idea at this time.[88] A distinguishable period (at the very most, a century) therefore appears to separate the mid-1700s competitiveness of the consumer goods industry (along with diversifying public tastes), and the mid-1800s mainstream emergence of strategic retail design to attract and entice the general consumer.

[84] Ken Parker, 'Sign Consumption in the 19th-Century Department Store: An Examination of Visual Merchandising in the Grand Emporiums (1846 – 1900)' (Queensland: Center For Social Change Research, Queensland University of Technology, 2003), pp. 8-9.
[85] Claire Walsh, 'The Newness of the Department Store: a View from the 18th Century', in *Cathedral of Consumption*, (Ashgate, 1999), pp. 46-71.
[86] Parker, p. 6.
[87] *Ibid*, p.9.
[88] Roth, p. 62.

Still, design agency was highly centralised in both of these centuries, with little to no consumer-focused market research. Instead assumption based approaches to gauging consumer preference were being employed. The methods used did not gauge consumer opinion or preference directly and instead they relied on indirect approaches such as copying the work of competitors and referring to pattern books. Such books acted to inform product manufacturers who wished to emulate current fashion and were produced by designers whose work would have typically been commissioned by the gentry.[89] Pattern books therefore tended not to directly gauge consumer taste, but instead they were often used under the assumption that designs generated by particular artists were likely to be popular by fashionable association and 'upward emulation'.[90] They also became increasingly popular design sources for homes in the 18th and 19th century.[91] Pattern books would therefore have likely served as useful guides on how best to design and furnish stores in line with assumed public taste, particularly towards the end of the 19th century when matters of retail architecture and display became increasingly important.

This relatively cheap and indirect market research activity sometimes even served to completely replace the role of the designer to save money over improving design quality.[92] In these cases it could be debated as to whether or not this constitutes a movement towards or away from a greater degree of consumer-focused design (as a definite movement toward

[89] Sparke, p. 32.
[90] *Ibid*, p. 17.
[91] Daniel Reiff, *Houses from Books: Treatises, Pattern Books, and Catalogs in American Architecture*, 1738 – 1950: A History and Guide, (Penssylvania: The Pennsylvania State University Press, 2000), p. 86.
[92] Sparke, p. 37.

research-driven design, as well as a potential movement away from original design input and effort to improve design standards).

Objective, Research-driven Design
1.3

'Objective, research-driven design' is the next category, defining design processes that are significantly directed by information gained through market research that directly gathers information about consumer needs, desire, preferences and opinions. This information is then used by professionals in order to achieve a higher level of objectivity when designing to attract consumers and to enhance enjoyment.

It is only from the early to mid-20th century that this distinct design approach is regarded as having firmly emerged, both in the consumer goods and retail design industry.[93] Procter and Gamble (P&G) is regarded as the earliest consumer goods manufacturer to establish a formal market research department to study consumer preferences in the 1920s, along with a research and development department that turned needs into products.[94] This marked what is recognised as the beginning of significant importance being placed on market research, with many other companies following in P&G's footsteps. By the second half of the 20th century P&G were conducting detailed consumer focus groups to help direct their products according to changing needs and tastes.[95] Also, with continued globalisation and cultural differences becoming more apparent, large product development companies were

[93] Larocci, p. 6-7.
[94] Dyer, Dalsell, Olegario, p. 58.
[95] Gough, L. *FMCG Selling* (Mankato, Minnesota: Capstone Publishers, 2003), p. 20.

increasingly opening foreign contact offices that could act as probes to better understand the specific needs and wants of consumers in different markets.[96] Evaluations conducted from afar were no longer adequate, and towards the later part of the 20th century commercial competition had led to the case that 'nearly every consumer products company had to conduct market research in order to prosper.'[97]

In terms of retail architecture, an important development in this direction came with the rapid increase in chain stores in Europe and the United States towards the end of the 19th century. The incremental increase in sales volume and profits that came with each additional store location saw the chain store become a rapidly prevalent business model into the early 20th century.[98] The economies of scale brought about through increasingly large-scale retail operations made larger investments in retail design worthwhile. By the mid-1900's prototype stores were becoming a popular method for chain stores to test layouts and retail design concepts. Google N-gram shows an emerging literary usage of terms like 'prototype store', 'prototype shops' and 'pilot shops' from the 1950s,[99] with a 1960s discussion in *Creative Site Evaluation for the Small Retailer* of inherent chain store activities that can be employed 'advantageously', including 'prototype store design'.[100] This kind of activity would have been impractical before the emergence of chain stores (without multiple outlets being owned by the same retailer), representing a significant development

[96] Bernhard Burdek, *History, Theory and Practice of Product Design* (New York: Springer, 2005), p. 71.
[97] HBWK, 'American Business, 1920-2000: How It Worked - P&G: Changing the Face of Consumer Marketing', *Harvard Business School*, 2000, <http://hbswk.hbs.edu/archive/1476.html> [accessed 24 March 2015].
[98] Roth, p. 38.
[99] *Google books Ngram Viewer* <https://books.google.com/ngrams> [accessed 3 February 2015].
[100] John Mertes, *Creative Site Evaluation for the Small Retailer*, Vol.96 (1962), p. 34.

in the direction of 'objective, research driven design'. Retailers were now intentionally testing retail design concepts with consumers before significant investment.

Also by the 1970's a highly objective, consumer-researched approach to visual merchandising had developed, grounded in statistical analysis. Chain stores began using past and current sales patterns to engineer 'planograms' (display diagrams) that would dictate layouts and merchandise displays across all of their stores, in order to maximise customer experience and sales.[101] Additionally the last decade has seen the rise of planogram software, used as a means of efficiently optimising individual store displays (as opposed to a one size-fits-all approach) by utilising data about local consumer behavior and demographics profiles.[102] This represents a desire to get even closer to consumers through research from a large amount of data that has become increasingly detailed and demographically categorised, moving away from a mass-market approach. Consumer-focused research specific to local catchment areas now often plays a significant role in the planning and design of modern shopping centers to ensure that new developments are designed as appropriately as possible to attract the largest number of consumers. As Peter Coleman explains in *Shopping Environments: Evolution, Planning and Design*;

> Competition between centers causes them to strive to achieve a difference and capture the public's need to spend […] Increasingly specialised knowledge enables research to be used to select retailers and create core design values to customise a center to a location. It is no longer sufficient to roll out a formula.[103]

[101] Roth, p. 32.
[102] Rajesh Ray, *Supply Chain Management for Retailing* (TBS, 2009), p. 74.
[103] Coleman, p. 11.

It appears that there may only be a few decades between the distinct emergence of formal market research activity in the design of retail architecture and in the consumer goods industry, both distinctly taking place in the 20th century. The time gap between both disciplines appears to have reduced, while design agency has opened up slightly to acknowledge the importance of understanding and being guided by direct consumer opinion.

Of course, some approaches to market research are more inclusive of participants than others. An example would be focus groups, in which consumers are often seen as participants in a design related brainstorming or problem solving process.[104] Here they are less passive than many other forms of market research, such as questionnaires and sales analytics. But a lingering distinction remains in that the information derived from focus group activities tends to be used subsequently to direct professionals in a formal design process.

Decentralised, Consumer-driven Design
1.4

'Decentralised, consumer driven design' is regarded in the mapping of this trend as being distinct 'from market research, which is a customer inactive, one-way process where companies ask a representative sample of customers for input to their innovative process.'[105] In Frank Piller's essay 'Open Innovation with Customers' the web-based mass-

[104] Gabrielle Kuiper, Bart Smit, *Imagineering: Innovation in the Experience Economy* (CABI, 2011), p. 25.
[105] Dirk Schafer, *Product Development in the Socio-Sphere: Game Changing Paradigms for 21st Century Breakthrough Product Development and Innovation* (New York: Springer, 2014), p. 4.

participatory activities of the T-shirt manufacturer *Threadless* are described as a step beyond this conventional market research.[106] Various other mass-participatory design initiatives in the consumer goods industry can be seen as exemplary cases, where the systems set in place would be capable of significantly transforming both the scale and locus of design agency (these platforms will be individually introduced, along with *Threadless*, through the remaining sections of this chapter).

In these instances public participation takes place on a magnitude of hundreds to thousands of individuals (or more), actively participating in the formal design process. Participants are facilitated to tweak designs themselves and gain feedback on their own design decisions (from other participants or by their own visual evaluation) and are then facilitated to adjust their design inputs accordingly. Participants are therefore supported in a self-organising process, which may simply take the form of browsing and building on each other's work. Distinct advantages can be associated with this approach, along with various doubts as to its commercial and architectural potential. These will be outlined in the follow sections.

Prediction
1.5

'We have the most data of any product development company in the world. We can be the most predictive product development company in the world.'[107] These are the words of Ben Kaufman, the CEO and founder of the hugely successful consumer goods manufacturer,

[106] Piller, p. 106.
[107] Ben Kaufman, interviewed by Josh Dean, 'Is This the World's Most Creative Manufacturer?' *Inc Magazine,* 2013, <http://www.inc.com/magazine/201310/josh-dean/is-quirky-the-worlds-most-creative-manufacturer.html> [accessed 29 December 2013].

Quirky (with product categories including general electronics, fitness devices, and home and garden ware). Launched in 2009, the company's revenue has progressed from $18.2 million in 2012, to $48.7 million in 2013, and was estimated to have reached $100 million in 2014.[108] The company has attracted $185 million in investment[109] and has acquired a partnership with the Fortune 100 giant General Electric;[110] while its core design team is composed significantly of online public participants. *Quirky* relies on this open community of over 1 million individuals (and rising)[111] to submit product concepts and vote on their favourites. On average thousands of product ideas are submitted every week and around three of these will tend to be accepted for further development, based on the public votes they have received.[112] From this point, voting and idea generation takes place iteratively over the course of an open development process.[113] Concepts are fine-tuned and refined according to the collective decisions and ideas (in the form of comments, sketches and photographs) of everyone that decides to take part. Product utility, form and aesthetics, in addition to pricing and punchy taglines (as well as explicitly crowdsourced market research) all form part of the open and collaborative development process. Participants are also rewarded with relative shares in any profits, if and when they come.

[108] Ruth Simon, 'One Week, 3,000 Product Ideas' *Wall Street Journal*, July 2014, <www.wsj.com/articles/one-week-3-000-product-ideas-1404332942> [accessed 27 January 2015].
[109] 'Quirky', *Crunchbase* <http://www.wsj.com/articles/one-week-3-000-product-ideas-1404332942> [accessed 27 January 2015].
[110] Joshua Brustein, 'Why GE Sees Big Things in Quirky's Little Inventions' *Business Week*, November 2013, <http://www.businessweek.com/articles/2013-11-13/why-ge-sees-big-things-in-quirkys-little-inventions> [accessed 27 January 2015].
[111] 'About', *Quirky* <https://www.quirky.com/about> [accessed 27 January 2015].
[112] 'Submit', *Quirky* <https://www.quirky.com/invent/submit> [accessed 27 January 2015].
[113] Heidemarie Hanekop, Volker Wittke, *New Forms of Collaborative Innovation and Production on the Internet* (Germany: University of Gottingen, 2011), p. 51.

As an open community, as well a commercial company, *Quirky* designs and produces standardised products for a mass-market using the insight and creativity of as many individuals as possible. The general motto is 'we make invention accessible.'[114] However Kaufman has also commented that their process generates consumer 'data that is completely conclusive.'[115] Rich and in many ways bias resistant participatory insight effectively constitutes the actual product design process, allowing the company to act confidently in the commercialisation of finished products. Kaufman describes the process as 'full-stack product development baked into market research'[116] and has been clear in praising the open community's ability to favourably steer *Quirky*'s business decisions.

This has become apparent at multiple points, such as the development of the storage device 'Crates', which is regarded as one of the company's least successful products. The concept was rushed to market with minimal community input at the urging of a major retailer.[117] Yet by contrast Bandits, a product that received substantially more community input, went on to become one of the company's most popular products. Kaufman openly criticised the idea for Bandits (essentially a durable elasticated band that is attached to a plastic hook), annoyed at the fact that the idea had survived it so far through the community's open development process. He is quoted as remarking 'Bandit is the stupidest idea I have ever seen […] no one will ever buy it.'[118] Yet, despite Kaufman's professional opinion bandit has

[114] 'About', *Quirky.*
[115] Ben Kaufman, interviewed by Josh Dean, p. 94.
[116] Ben Kaufman, Interviewed by Peter Diamandis, 'The Five 'Quirky' Steps to Launching a Great New Product.' *XPrise*, (2013), <http://www.xprise.org/news/ceo-corner/five-quirky-steps-launching-great-new-product> [accessed 27 April 2015].
[117] Simon, 2015.
[118] Ben Kaufman, interviewed by Joao Medeiros, 'Enabler of the Bright Idea' *Wired UK*, May 2013, <http://www.wired.co.uk/magazine/archive/2013/06/start/enabler-of-the-bright-idea> [accessed 4 January 2015].

so far sold over 800,000 packs[119], and is one of *Quirky*'s top sellers. Kaufman mentioned in an interview for Wired, 'I love that because it shows that most products are run past people like me, who think they know best.'[120]

Quirky's design approach can be related to the popular practice of minimum viable production.[121] This is where new products are launched with a minimum amount of features (enough to successfully fulfill a certain function) after which consumer feedback gradually guides targeted and intelligent development. By avoiding an attempt at 'superhman comprehensiveness', minimum viable strategies constitute the equivalent of Lindbloms incrementalist approach to policy and planning. Unlike strict incrementalism or minimum viable production, however, mass-participatory design platforms like *Quirky* have pulled this approach into Banham's pre-established framework of objective decision-making. *Quirky* engages and harnesses consumers, rigorously and cost effectively, evolving products via their online platform before manufacturing even a single iteration for consumption. It is through this cost-effective, accurate, anticipatory sense and inherent knowledge of real world taste and demand that company-communities like *Quirky* achieve significant success.

As argued by Jeremy Till in 'Architecture Depends', [122] the real world is messy and never entirely predictable, and contingency is therefore unavoidable. But of course Till's idea of contingency and unpredictability is surely better accommodated by this mass-participatory

[119] 'Bandits, Elastic Bands with Hooks' *Quirky*, <https://www.quirky.com/products/105-bandits-elastic-bands-with-hooks> [accessed 1 January 2015].
[120] Ben Kaufman, interviewed by Joao Medeiros, 2015.
[121] I argued this in my article (written during my ResM programme of study), 'Social Media and the Minimum Viable Brand-scape' in Design Intelligence, May, 2014, p. 35. (See Publications).
[122] Jeremy Till, *Architecture Depends* (Cambridge, MA: MIT Press, 2009).

process, as it openly invites the very actors that constitute a significant element of unpredictability in the world actively into the design process itself. Jonathan Hill's 'Actions of Architecture' presents a structured exploration of various design approaches that attempt to accommodate architectural contingency (largely through flexibility by technical means, spatial redundancy, or intentional ambiguity to stimulate variable interpretation). But as Hill acknowledges early in this discussion, this still 'assumes that the architect can cater for the future needs of the user',[123] which cannot wholly be the case according to Non-plan theory. Till concluded that architects should let go of the notion of complete control to become 'citizen-sense maker'[124] or 'interpretive agent'[125] – thereby relating to the contemporary notion of advocacy planning. Hill discusses deeper forms of user participation as a means of fulfilling contingency, though they are regarded as potentially ineffectual in the long-term.

> Shifting the terms of authorship of architectural design can be effective at the time of construction. But it does not necessarily increase the likelihood of a building or space being responsive to future users. If a space is too functionally specific it may achieve the opposite.[126]

Hill's argument does not suggest that an architect could predict the precise needs of future users; only that the architect could at least have attempted to do so. Bias, or skewed perspective, is the element that needs to be minimised, and as Hayek has asserted this can only be achieved by gathering the insight of as many potentially relevant individuals as possible and engaging them in active collaboration. Essentially architectural engagement

[123] Jonathan Hill, *Actions of Architecture* (London: Routledge, 2003), p. 29.
[124] Till, p. 151.
[125] *Ibid*, p. 164.
[126] Hill, p. 61.

should extend not just as participation, but as mass-participation, attempting to predict targeted consumer demand rather than appease a very temporary group.

Productivity
1.6

Not only does opening up the creative process through appropriate mechanisms improve the chances of representative, predictive, and unbiased insight, but it can also substantially improve productivity. Nike, for example, began to allow consumers to customise the aesthetic design of a limited range of footwear in 1999,[127] but the company have since expanded this range of editable products while also allowing customers to browse, build on, and purchase designs created by other consumers (owing to a substantial website update in 2005).[128] A diagram illustrating this distribution of active design agency at various stages in the NikeiD process is provided in Figure 2.

[127] Angela Lin, *Consumer Information Systems and Relationship Management: Design, Implementation and Use,* (Business Science Reference, 2013), p. 123.
[128] Karen Spiegel, 'NikeiD.com Wins Distinguished Silver in Industrial Design Excellence Awards Competition,' *RGA*, 2005, <http://www.rga.com/news/releases/NikeiD-com-wins/> [accessed 27 January 2015].

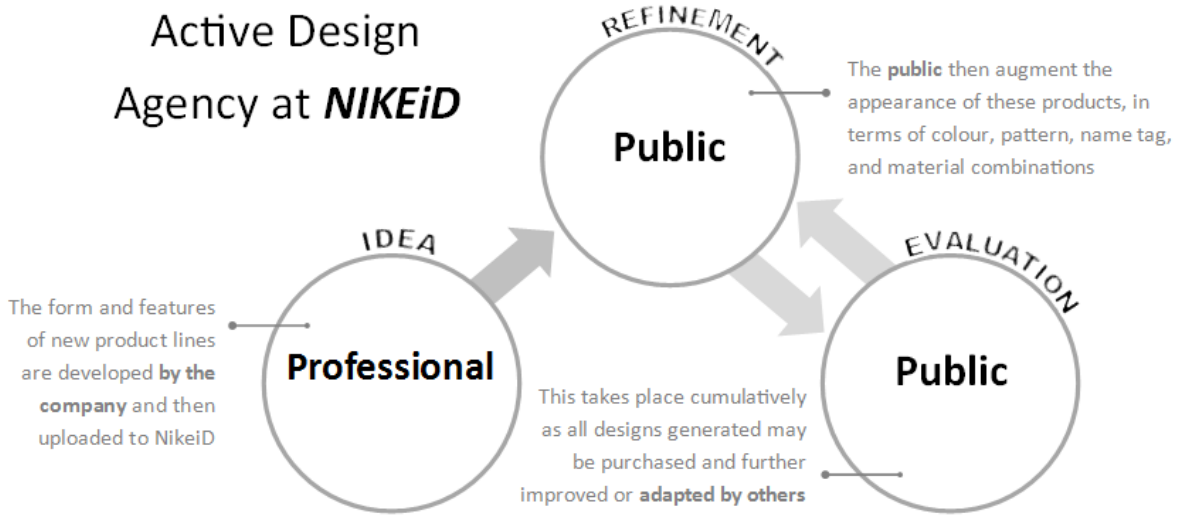

Figure 2, Active design agency at NikeiD (own illustration)

Following in Nike's footsteps major competitors now feature similar web-based mass-participatory design platforms, including *Adidas*,[129] *Puma*,[130] *Reebok*,[131] *Converse*,[132] and *Vans*.[133] In fact, The Configurator Database is a website that currently lists over 900 companies in 16 different subcategories of consumer goods that have all launched similar platforms.[134] Nike's President of Direct to Consumer business, Christiana Shi, stated in a 2013 conference that due to continued success newly developed product lines are now frequently made available to consumers via the company's online design platform several weeks before launching in the broader marketplace, providing public design input and detailed insight[135] on a massive scale. According to Shi 'last year, in a period of about 2

[129] 'Customise', *Adidas,* <http://www.adidas.co.uk/customise> [accessed 27 January 2015].
[130] 'Puma Factory', *Puma,* <factory.puma.com/> [accessed 27 January 2015].
[131] 'Customise', *Reebok*, <*www.reebok.com/us/customise*> [accessed 27 January 2015].
[132] 'Design Your Own Converse Sneaker', *Converse,* <www.converse.com/landing-design-your-own> [accessed 27 January 2015].
[133] 'Custom Shoes', *Vans,* <www.vans.com/custom-shoes.html> [accessed 27 January 2015].
[134] 'Explore The World of Configurators', *Configurator Database* <http://www.configurator-database.com/> [accessed 27 January 2015].
[135] Angela Lin, pp. 123-24.

weeks before the broader launch of the Free Run+ 3, consumers had already created over 1 million designs on NIKEiD, 1 million.'[136]

Yet even despite this success there are doubts regarding the future potential for web-facilitated design of this sort, primarily due the time intensive nature of product customisation (both in terms of manufacture and design). Jonathan Rowley, Design Director at the high-end 3D printing company Digits2Widgets, argued against the case that, passing one hundred people on the high street, 'each and every one of those people is actually motivated, interested, creative enough, has the time or the inclination to go home and make their own bits and bobs.'[137] However, what this argument fails to consider, is that even if only a small fraction of the public are engaging in open source product design this is enough to create tremendous value for the rest of the population. As the consultant Clay Shirky points out in his 2008 book 'Here Comes Everybody', 'fewer than two percent of Wikipedia users ever contribute, yet that is enough to create profound value for millions of users.'[138]

It could also be argued that when compared to a group of professionals even a small percentage of a large population is likely to be far more representative of that population as a whole, in terms of opinions, preferences, needs and desires (manifest through their design ideas). This is what allows initiatives like *NikeiD* to gather actionable insight into

[136] Christiana Shi, 'Nike Inc. Investors Meeting.' October 2013, <http://investors.nike.com/files/doc_events/NIKE,%20Inc.%202013%20Investor%20Day%20Transcript%20-%20Complete%20with%20QA%20-%20FINAL.pdf> [accessed 21 January 2015].
[137] Jonathan Rowley, interviewed by David Reid, *Click*, BBC, 7 September 2013.
[138] Clay Shirky, *Here Comes Everybody* (The Penguin Press. 2008), p. 125.

detailed customer design preferences (even establishing intricate connections with specific factors such as consumer locality)[139] and the element of market prediction discussed as driving successful companies like *Quirky*.

Additionally, *Quirky* has even had to consider the development of their own branded retail outlets, in order to bypass retailer waiting lists and to capitalise on their highly acclaimed productivity and capacity for continuous innovation. As Kaufman has stated, 'from the very beginning we said we wanted to be the best product machine in the world so we could be the best retailer in the world.'[140] But as a company that has so far relied on mass-participatory design to guide its product manufacturing activities, is it conceivable that the company could also harness this insight to establish the design and location of their future stores? I posed this question to the online community in a 2014 post, in *Quirky*'s open discussion forum (see Appendix 1). Members subsequently discussed and pitched simple ideas, and within 24 hours SketchUp scenes had even been uploaded depicting one user, Ernesto Tan's, initial insight for how the store might look (see Figure 3).

[139] Lin, p. 123.

[140] Ben Kaufman, interviewed by J.J. Colao, 'Can a Crowdsourcing Invention Company Become 'The Best Retailer in the World?', *Forbes*, 27 May 2013, <http://www.forbes.com/sites/jjcolao/2013/05/09/can-a-crowdsourcing-invention-company-become-the-best-retailer-in-the-world/> [accessed 9 March 2015].

Figure 3, Ernesto Tan, Quirky's Architecture, [online] http://www.quirky.com/forums/topic/27915 [04/01/14]

Still, a point that is keenly debated is to what extent even a large body of the general public are capable of generating truly innovative and useful design ideas in comparison with a much smaller team of highly experienced professional designers. In 2009 Clive Grinyer, then Director of Customer Experience at Cisco, presented a TEDx Leeds talk entitled 'The Democratisation of Design'. In it he expressed the opinion that consumer participation does not generate significant innovation in itself, referring to leaps in creative problem solving as opposed to small and iterative innovations, which are heavily based on what has gone before. The example he gave was a conceptual washing machine that cleans clothes through the natural filtration process of plants, energy efficiently but time-consumingly completing a single washing cycle within a week. He compares the originality of this

innovation to the kinds of ideas that would 'probably' be generated in a consumer engagement session, including 'a bigger door' and 'nice, easy buttons'.[141] Grinyer, however, is most likely speaking from experience from relatively small consumer focus groups – a long standing method for gathering consumer insight.[142]

After all *Quirky* has certainly demonstrated that meaningful product innovations often arise from scaled-up public participation. 'Making invention accessible' behind the scenes are *Quirky*'s team of in-house design professionals, engineers and marketers, who work alongside the open community to ensure the final products are suitable for distribution; this is a crucial factor, and potentially leaves room for the kind of technical innovation Grinyer is defending (a diagram depicting this distribution of design agency at *Quirky* is provided in Figure 4).

[141] Clive Grinyer, 'The Democratisation of Design' *TEDxLeeds*, 9 October 2009, <http://www.tedxleeds.com/clive-grinyer-the-democratisation-of-design/> [accessed 27 January 2015].
[142] 'Focus Groups.' *Marketing Research,* <http://www.marketingresearch.org/focus-groups> [accessed 8 February 2015].

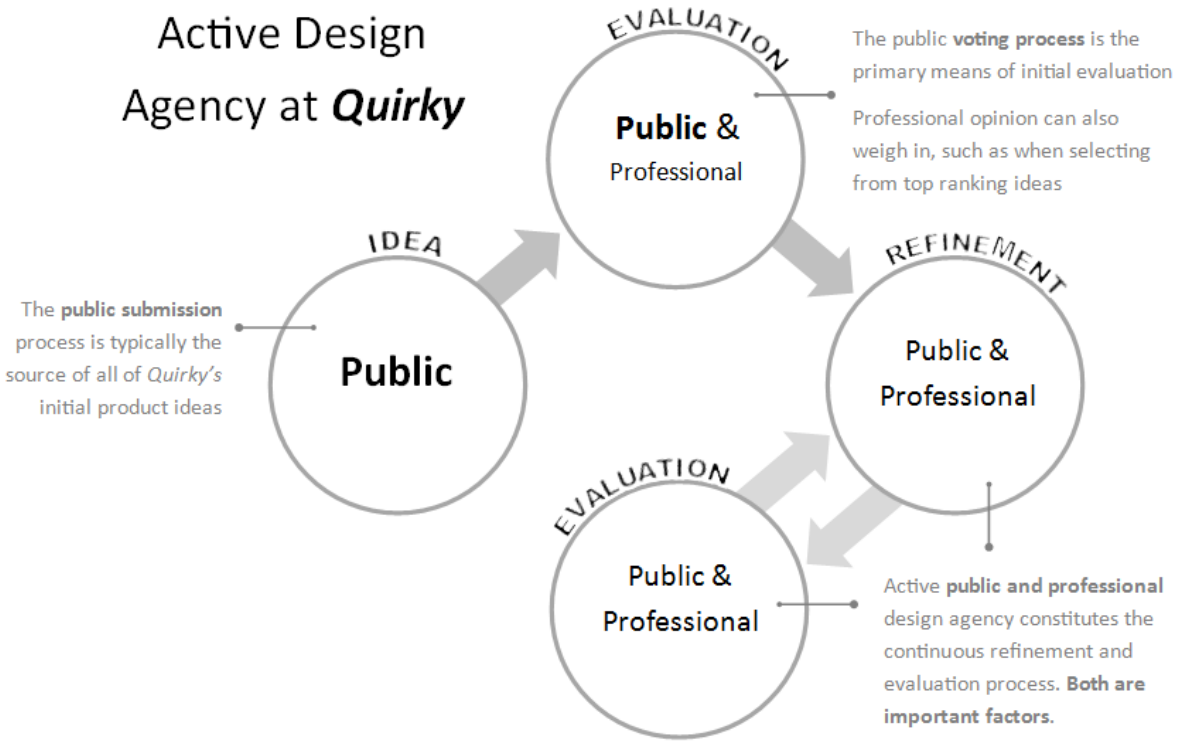

Figure 4, Active design agency at Quirky (own illustration)

However all of *Quirky*'s initial concepts are the sole products of the open community's submission and voting system,[143] and it is difficult to dispute the community's capacity for collectively generating and recognising innovative ideas. Before *Andreessen Horowits* invested tens of millions of dollars in *Quirky*, Scott Weiss, a partner at the firm, interviewed all of *Quirky*'s major retailers in 2012. According to Weiss all of them were shocked by the pace of *Quirky*'s rapid innovation with one retailer quoted as remarking 'Nobody is innovating at the pace that *Quirky* is.'[144]

[143] 'Terms of Use', *Quirky*. July (2013) <https://www.quirky.com/home/terms> [accessed 27 January 2015].
[144] Scott Weiss, interviewed by Josh Dean, 'Is This the World's Most Creative Manufacturer?' *Inc Magazine*, October 2013, p. 94 <http://www.inc.com/magazine/201310/josh-dean/is-quirky-the-worlds-most-creative-manufacturer.html> [accessed 29 December 2013].

Promotion
1.7

In addition to prediction and productivity, services like *NikeiD* allow customers to share their creations not only by making them available for others to purchase or augment on the website, but also by allowing customers to show off and share what they have designed within their own online social networks. This mechanism act to virally promote the company's brand as well as the consumer generated product in some very effective ways.

A tangible example of the power of mass-participatory design to drive peer-to-peer promotion is given by *Threadless*. Launched in 2000, *Threadless* was one of the earliest companies to rely entirely on its open community of design savvy, would-be consumers as the sole design force. Graphic designs are submitted and voted on by the community, while forum discussions help the refinement of various design concepts. Each week the most popular designs are selected and produced as a limited edition printed T-shirt, with the creators compensated through cash prizes in addition to community fame. According to Jeff Howe, in his 2008 book 'Crowdsourcing', the company has nearly doubled its revenue every year that it has been in business (up until at least 2006, when *Threadless* stopped publishing sales data, at which point revenue was at $17 million).[145] On top of this the company benefits from significant profit margins. There has been no need to hire designers and, more to the point, no need to employ an advertising or marketing department, as the community

[145] Jeff Howe, 2008, p. 2.

have avidly promoted their own creative work. This mechanism alone has been sufficient to see *Threadless* through consecutive years of substantial growth and development.[146]

In this case the product development company benefits from prediction, productivity and promotion, but the product developer as a practicing professional is sidelined and even rendered redundant. This bears similarity to the dual nature of objective, research-driven design (as discussed): potentially saving money through indirect research approaches that replace the professional designer; or potentially as an investment in directly gauging consumer demand and guiding the professional designer, to compete on quality and not necessarily price. The difference in this contemporary instance of professional redundancy, however, is that original input is actually being sourced and created rather than clearly copied and replicated. In any case low quality submissions would be unlikely to survive the mass-participatory voting process. After all, online questionnaire research in 2007 suggested that 'the most important reason why you purchase from *Threadless*' is firstly 'innovative designs', secondly 'exclusivity of designs (short run production cycles, facilitated by the abundance of design input)', and thirdly 'involvement in the design process'. 'Price' came forth in this ranking of importance.[147]

It must be noted, however, that *Threadless* is a distinctive case in that those individuals who submit necessarily possess abilities in graphic design, maintaining sole authorship in the absence of a clear and formal collective effort (other than forum discussions). Discounting

[146] *Ibid*.
[147] Adam Fletcher, 'Is the Best Product a Unique Product? Exploring Alternatives to Mass Customisation with the Online Community of Threadless', in *Research in Mass Customisation and Personalisation: Strategies and Concepts* (World Scientific, 2009), p. 130.

the activity of voting, this limits the range of individuals who participate. Research in 2009 suggested that 60% of the open community had never submitted a design due to 'lack or artistic ability'.[148] Figure 5 illustrates this arrangement.

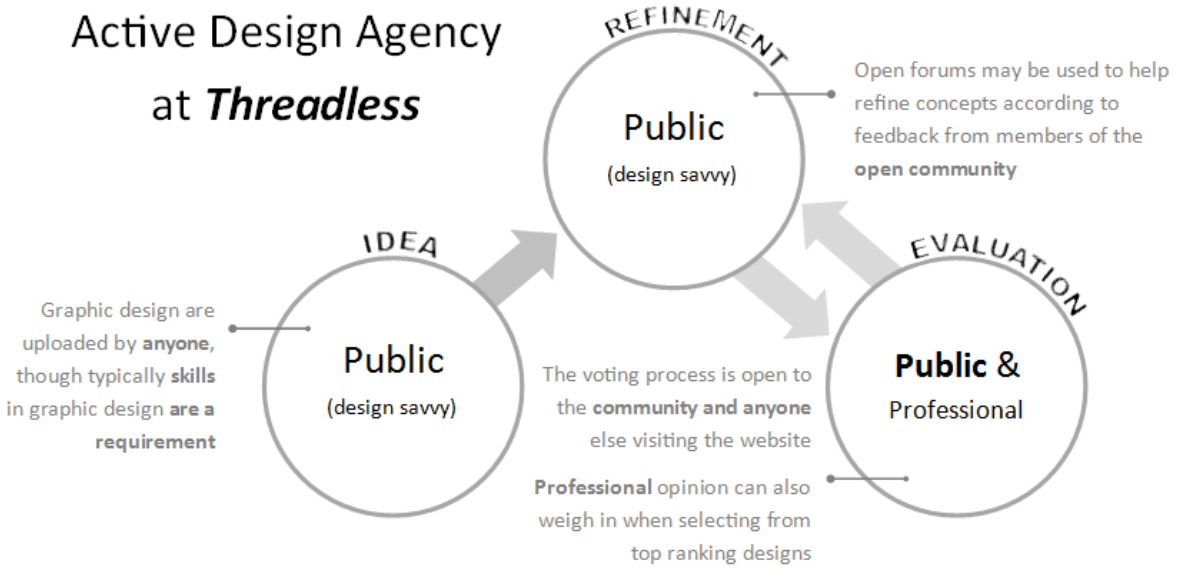

Figure 5, Active design agency at Threadless (own illustration)

Companies and initiatives like *NikeiD* and *Quirky* on the other hand demonstrate more of a partnership alongside their open community. Consumer design input on *NikeiD* relates mostly to surface aesthetics, but consumers are able to browse and very simply (and cumulatively) adapt the work of others. More importantly these consumer are building on the initial, technical, and considered work of in-house professionals. Here it can be seen that professional design input becomes an important component for commercially successful mass-participation, by fulfilling what may be seen (at least) as 'minimum viable' requirements amongst decentralised consumer-driven design. As mentioned, *Quirky* also

[148] *Ibid*, p. 133.

maintains a team of designers and engineers who figure out how to uncover and manufacture functioning products from collectively generated design concepts.

This online, 'minimum viable' development describes Hayek's dispersed knowledge, Lindblom's incrementalist theory, and (as a pre-established endeavor) Banham's objective framework for decision; but its significance in this discussion is that it also encompasses the component of experienced, knowledgeable, and to this extent centralised design input (while vitally minimising the bottleneck of professional interpretation). Jeremy Till, in his article 'Architecture of the Impure Community', asserts that 'it is irresponsible for architects not to use their knowledge' as opposed to the idea that 'the only responsible architect is the one who bows to the demands of the user.'[149] Till argues that users can find themselves further disempowered in the design process in the absence of any knowledgeable or professional input. While this focused on the politics or urban development, a comparison can be drawn to the way that *Quirky*'s community require the company's expertise in making invention accessible.

The idea of a somewhat 'minimum viable' approach in facilitating open participation is important to emphasise at this point, as *Threadless's* individualism (by contrast) bears similarity to the majority of web-based architectural initiatives, which suffer similar participation pitfalls. These will form the subject of the following chapter (Chapter Two) drawing on a deeper understanding of what might constitute a Non-plan framework for

[149] Jeremy Till 'Architecture of the Impure Community', *Occupations of Architecture* (London, Routledge, 1998), p. 72.

decision, in terms of the distribution of design agency and the important element of minimum viability.

This chapter has highlighted potential competitive benefits of decentralising design agency (productivity, prediction and promotion) through the consumer goods examples of *NikeID*, *Quirky* and *Threadless*. This element of competition has in fact presented itself as a stimulating force throughout the entire trend that has been mapped in this chapter. These principles will be carried forward and, in particular, the concept of competition will form a pivotal element in the conclusion of this thesis. Additionally, this chapter has shown how the consumer goods industry has acted as a rough guide for the future trajectory of consumer-focused retail design approaches over time. By an extrapolation of this trend a more or less mainstream emergence of mass-participatory retail architecture is indicated to take place at some point within the next few decades. This is highly speculative, lacking an evaluation of social, political and industry factors specific to architectural design. These will be uncovered through the following chapters. In fact the early emergence of web-based design platforms for the architectural design industry can already be seen and critiqued, as will be demonstrated in Chapter Two.

TECHNOLOGY, TOKENISM AND PARTICIPATORY ARCHITECTURE

2.0

In the same year that New Society magazine featured the Non-planners' 1969 article, Sherry Arnstein also published her widely referenced 'A Ladder of Citizen Participation'. Arnstein presented a scale of participatory design in urban planning, which ranges from 'nonparticipation', through to 'tokenism', to 'citizen power' (each subdivided to form a total of eight different categories). 'Consultation' resides in the middle of this scale, and as Arnstein explains;

> When powerholders restrict the input of citizens' ideas solely to this level, participation remains just a window-dressing ritual. People are primarily perceived as statistical abstractions.[150]

Arnstein described this category as a research based activity, sampling public opinion through meetings and attitude surveys. Next comes 'placation', the highest rung in the tokenism category. Here a number of individuals, 'hand-picked' (or sampled), are potentially capable of a greater degree of influence in decision-making processes while 'powerholders' 'judge the legitimacy or feasibility of the advice.'[151] By these standards, however, even the most inclusive of mainstream retail design practices today have not escaped Arnstein's early descriptions of participatory 'tokenism', despite the intervention of web-based technology.

This chapter will provide examples to support this argument, that relatively conventional methods of market research remain the mode by which even the most 'innovative'

[150] Arnstein, p. 219.
[151] *Ibid*, p. 220.

practices engage with consumers, while active design agency in this commercial context remains largely centralised. *IDEO* and *Sheridan & Co* have been chosen as examples based on their position as global, highly innovative retail design experts, as will be discussed. Additionally, an overview of social media facilitated architectural design in general will be presented, exploring contemporary approaches to participatory architecture against the backdrop of mass-participatory consumer goods. However, both in terms of the scale or locus of design agency, notions of mass-participatory architecture will be argued as 'token'. This argument will then form the basis of Chapter Three, which will further explore the political context behind commercial architecture's apparent disinclination towards a transition into 'decentralised, consumer-driven design'.

IDEO
2.1

IDEO is a well-known global design company that explicitly employs a 'human-centered' or user-focused approach. With projects ranging from the public to private sector, encompassing organisational design, brands, 'products, services, spaces and interactive experiences',[152] the consultancy is active in a range of design disciplines, including retail. It has been consistently ranked as one of the most innovative companies in the world by the Boston Consultancy Group (between 2005 and 2008)[153] and by the Fast Company[154] (between 2008 and 2012). It is perhaps not surprising then, that *IDEO* hosts its own mass-participatory design platform (launched in 2010). *OpenIDEO* is an 'open platform for

[152] 'About', *IDEO,* <http://www.ideo.com/about/> [accessed 24 March 2015].
[153] Peter Jones, Peter Robinson, *Operations Management,* (Oxford: Oxford University Press, 2012) p. 314.
[154] *Fast Company,* <http://www.fastcompany.com/> [accessed 4 March 2015].

innovation' with a mass-participatory design process comprised of three stages. The first is 'inspiration', where anybody can post images, videos, comments and stories to 'get everyone going'. The second is 'concepting', where anybody can post concept solutions, building on the work of others; and 'evaluation' is the third, where fully formed concepts are openly commented on and rated, with the winning solutions 'rising to the top'. These winning concepts are then made available to the challenge sponsor. As the company explains,

> In 2009, a London-based team observed that online collaboration and consumer activism were trending up; more than 2 billion people worldwide now engage in Web-based interactions; and sought ways to harness that tremendous human resource.[155]

The applications for the platform are ambitious, seeking to tackle global challenges through large-scale collaborative creativity as a response to broad questions, such as 'How might we improve education and expand learning opportunities for refugees around the world?'[156] 'Social good' is the explicit overarching mission for *OpenIDEO*, and in fact all resultant intellectual property is made available under a creative commons license.[157] This aspect, however, hints away from the commercial realm. Regardless of the company's experience and position having designed its own multi-award-winning mass-participatory design platform and the commercial suitability demonstrated by consumer goods, the firm's approach to retail design takes a more conventional form.

[155] 'OpenIdeo for IDEO', *IDEO*, <http://www.ideo.com/work/openideo> [accessed 24 March 2015].
[156] 'How might we improve education and expand learning opportunities for refugees around the world?' *OpenIDEO,* <https://openideo.com/challenge/refugee-education/brief> [accessed 24 March 2015].
[157] 'OpenIDEO for IDEO', *IDEO.*

Nevertheless, in the international brand consultancies *Wolff Olins* and *Flamingo*'s 2012 Game Changers report, in the article entitled 'Borrowing from the Web's Playbook', *IDEO* was associated in their 2010 design approach to *Walgreens* pharmacies with the 'height of this relationship […] where consumer are engaged to create the product or services themselves.'[158] The *Walgreens* project involved significant research efforts, not just through conducting in-depth interviews and 'shopalongs' with consumers, but by translating these insights into two full-scale prototypes, where designers role-played new service positions. According to *IDEO*'s website, 'over the course of several months, the *IDEO* and *Walgreens* teams walked dozens of consumers through these prototypes to gain feedback and evolve the design.'[159]

The rough number of consumer participants quoted here is small in comparison to distinctly mass-participatory, internet-facilitated design initiatives. But more importantly the information derived from these activities is used to direct professionals. The consumers themselves are relatively passive in the formal design process, answering questions and giving comments, guiding subsequent design activities for professionals who later filter and interpret these bits of information. While this could be described as a minimum viable approach (characterised by fast and frequent feedback cycles) the locus of active design agency resides with those conducting and making use of the research, and the scale of

[158] Mary Muckerman, 'Borrowing from the Web's Playbook', *Game Changers Report*, 2012, <http://gamechangers.wolffolins.com/> [accessed 3 February 2014].
[159] 'Community Pharmacy for Walgreens', *IDEO,* <http://www.ideo.com/work/community-pharmacy> [accessed 24 March 2015].

participation is limited to a relatively small but representative sample (see Figure 6 for an illustration).

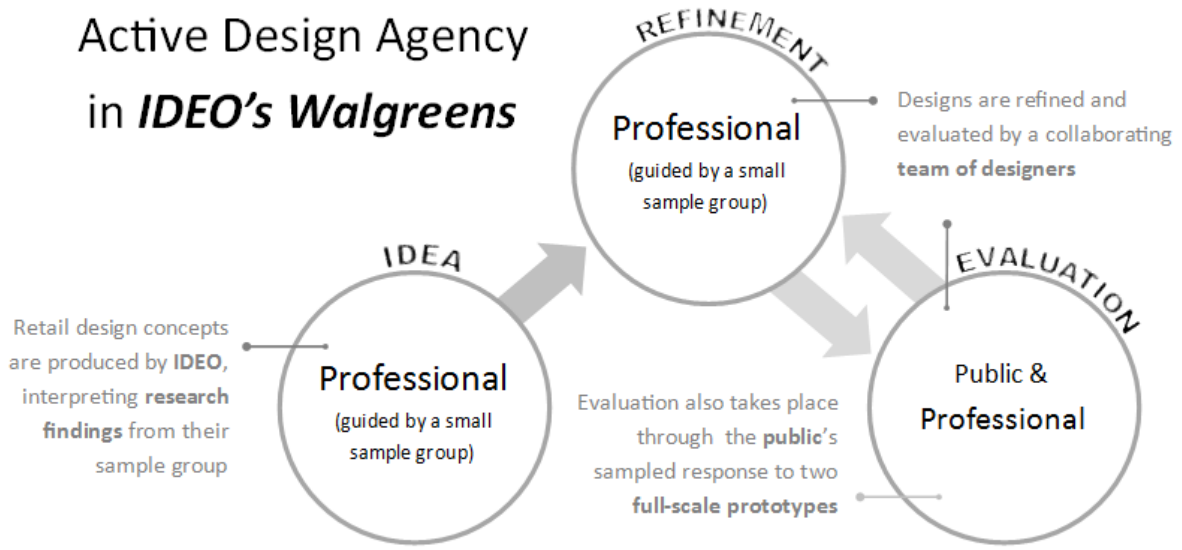

Figure 6, Active design agency in IDEO's Walgreens (own illustration)

Sheridan & Co
2.2

Sheridan and Co is yet another 'pioneering'[160] global retail design agency, with offices in London, New York, and Shanghai. During February 2014 email correspondence Michael Sheridan (the chairman and founder) explained the purpose of an initiative called *The Study*, launched by the practice in 2009 (see Appendix 3). As a proprietary retail space in central London, *The Study* acts as a testing ground and blank canvas for the firm's retail design concepts. An underlying focus is to emulate the web-based interactions of Internet shopping. 'It is assets such as this that allow us to gather invaluable insights directly from the shopping community, creating that extra level of engagement.' Sheridan then explains

[160] 'The Study', *Sheridan & Co,* <http://www.sheridanandco.com/thestudy.html> [accessed 3 February 2015].

strategies for gaining detailed consumer analytics comparable to the internet shopping journey:

> This week we launch 'shop-lift', a consumer interactive product initiative that delivers new levels of engagement and experience through tagged products. At the same time this feeds back real time analytics to the brand, such as for how long and how often products are in the hands of customers.[161]

The purpose of The Study and the Shop-lift initiative is to better optimise consumer experience and sales performance through detailed research, 'enabling brands and retailers to fine tune pricing, enticement, experience and environmental elements and be able, in real time, to record the effect they have in a real space state.'[162] In effect, 'people are primarily perceived as statistical abstractions.'[163] Arnstein's tokenism becomes the form of any perceived public participation. The scale of implicit consumer engagement may become substantial, but the locus of explicit design agency remains unchanged. The application of digital technology is not to facilitate the active cooperation demanded by Hayek, but to more closely observe, to gather data, and to allow designers to better act on behalf of their users (see Figure 7 for an illustration).

[161] Michael Sheridan (Email correspondence, 19 February 2014).
[162] 'Focus On: Technology', *Retail Focus*, April 2014, p. 58.
[163] Arnstein, p. 219.

Figure 7, Active design agency in Sheridan & Co's Shop-lift Initiative (own illustration)

In these examples interior retail design has intentionally been the focus, as it is actually the most open aspect of retail architecture, while 'there is far less openness to having discussions about the exterior of buildings.'[164] In a 2009 interview for Frame Magazine Liz Sanders (an influential advocate and multi-disciplinary practitioner of participatory design) linked this circumstance to the obvious tendency towards greater consumer participation in the consumer goods industry. Sanders described the 'refresh rate' of projects as a critical factor, with interior spaces and consumer products having substantially shorter lifespans than the outer shells of architecture. These brief lifespans provide a greater degree of flexibility for trying out new approaches, such as rigorous consumer engagement and participation.[165]

[164] Liz Sanders, interviewed by Jane Szita,'Everyone's An Expert', *Frame Magazine*, Issue 70 (2009), p. 111.
[165] *Ibid*.

It seems ironic that it is the element of risk to which the relative lack of participatory activities in current architectural practice have been attributed. Market research is the conventional activity for minimising this risk, but the limitations of a passive-consumer approach in anticipating consumer behavior have already become apparent. The influential 2004 book 'The Future of Competition' explicitly states from a business perspective the importance of predicting rather than responding to perceived consumer preference. The authors C.K. Prahalad and Venkat Ramaswamy describe 'the traditional system of value creation' where an attempt is made to match supply against observed or researched demand. The 'future of competition', on the other hand, is described as a 'new frame of reference for value creation', where consumers actively dictate and 'co-create' supply, working collaboratively with a firm.

An architectural example for this argument[166] would be Frank Gehry's iconic Guggenheim Museum Bilbao, which is a demonstrated economic triumph. This bizarre looking building revealed powerful public demand for novel and iconically outstanding forms, and since Guggenheim Bilbao's 1997 opening it has acted as a model for many commercial buildings hoping to obtain comparable levels of success (following the demonstrated demand for iconic spectacles). The Guggenheim is believed to have been so influential that the term 'Bilbao effect' was coined in 2002 to describe this postmodern movement. Yet, having coined this term, Witold Rybczynski amended it six years later to the 'Bilbao anomaly' to describe the actual rarity of intended architectural icons that go on to achieve any notable

[166] I have further discussed the practical difference between assuming and ensuring the architectural preference of the public in my article (written during my ResM programme of study), 'Anticipate or Participate' in *Interiors & Sources*, May, 2014, pp. 41-2 (See Publications).

success. As Rybczynski discusses, even Gehry has been unsuccessful in replicating this effect. The 'Bilbao anomaly' describes the inherent limitations of acting on behalf of the public with large-scale architectural statements. As explained, 'Architectural icons are generally anointed by the public, and sometimes a long time after they are built. So why do developers think that they can create instant icons?'[167]

Architectural Crowdsourcing
2.3

Briefly bringing this discussion back to product development, Professor Frank Piller (co-director of MIT's Smart Customisation Group) stated in his article 'Open Innovation with Customers: Crowdsourcing and Co-Creation at *Threadless*:

> Conventionally, heavy investments in market research are seen as the only measure to access this information. So the basic question remains: How can a company identify perfectly the customer's needs to forecast their future desires and design and produce on this basis optimal assortments? One opportunity to handle these challenges is shown by *Threadless*.[168]

Threadless relies wholly on the participation of its open community in the very production of commercial value, and along with similar initiatives and companies such as *NikeiD* and *Quirky,* it represents a distinct, contemporary approach to gauging and fulfilling consumer demand. Yet, as identified in Chapter One, *Threadless*'s emphasis on the individual designer and lack of both professional and consumer collaboration severely limits the range of individuals that can realistically submit design input. In effect (unlike *Quirky*, *NikeiD* and

[167] Rybcsynski, 2008.
[168] Piller, p. 106.

other mass-participatory design platforms), *Threadless's* mass-participatory approach reveals an element of tokenism, and in this respect bares similarity to many web-based initiatives in the architectural design industry in general, which have commonly been described as 'crowdsourcing'.

In 2006 the first usage of the now widely used term crowdsourcing was published in a Wired article by Jeff Howe.[169] 'The Rise of Crowdsourcing' described a significant trend where various industries (stock photograph, broadcasting, and product research and development) were radically restructuring around the phenomenon of large-scale open participation, outsourcing tasks to a public (or 'open') crowd, generally using the internet. In the same year that Howe published this influential article, an issue of AD entitled 'Collective Intelligence in Design' described the emerging use of web-based telecommunication technology in the field of architectural design. Christopher Height and Chris Perry, in their introduction, acknowledged the comparatively slow pace with which the architectural design industry had begun to exploit the potential of the *World Wide Web*, nonetheless noticing 'the first few wavelets of change, however, are starting to crash against the shore of conventional architectural practice.'[170]

Since then notable developments that have taken place include the launch of web platforms such as *ArchBazar* (2010), *CoContest* (2012), and *Prodigy Design Lab* (2014); each of which are similar. These sites specialise in the co-ordination of 'open' architectural competitions

[169] Jeff Howe, 'The Rise of Crowdsourcing', *Wired*, Issue 14.06, (2006). <http://archive.wired.com/wired/archive/14.06/crowds.html> [accessed 14 May 2015]
[170] Christopher Hight, Chris Perry, Collective Intelligence in Design, *Architectural Design*, Vol. 76, No. 5 (2006), p. 4.

of varying sizes, often allowing anybody to submit a brief and then benefit from crowdsourced proposals from multiple designers around the world (all organised through the use of online social media). *ArchBazar*, in fact, describes itself as 'the first-of-its-kind crowdsourcing platform for architectural design services'.[171] Yet crucially, Jeff Howe described crowdsourcing fundamentally as an 'open call to a large, undefined group of people, generally using the Internet.'[172] 'Undefined' is emphasised as a crucial term, 'because the person who you *think* would be best qualified to perform a job isn't always the best person to do it.' *ArchBazar* and similar sites, while certainly 'using the internet', tend to direct their calls relatively definitively to professional 'architects', 'interior designers' or 'planners'. The productive, predictive, minimum viable approach is absent. Competition takes precedence over inter-entrant collaboration (as is often the case)[173] and public participation in the design process is not explicitly supported. Subsequently the number of submissions for each brief has been quoted by *ArchBazar* as averaging less than 10.[174] A diagram representing the typical distribution of design agency at *ArchBazar* is provided in Figure 8.

[171] 'FAQ Clients', *ArchBazar*, <http://www.arcbasar.com/faq-clients> [accessed 24 March 2015].
[172] Jeff Howe, interviewed by BrightSightGroup, 'Jeff Howe – Crowdsourcing', *YouTube*, BrightSightGroup, 00:00:50 <https://www.youtube.com/watch?v=F0-UtNg3ots> [accessed 14 May 2015].
[173] Peter Blundell Jones, 'Öscül Postscript: the Gelsenkirchen School as Built', in Peter Blundell Jones, Doina Petrescu and Jeremy Till (eds), *Architecture and Participation* (London: Spon Press, 2005), p. 187.
[174] 'FAQ Clients', *ArchBazar.*

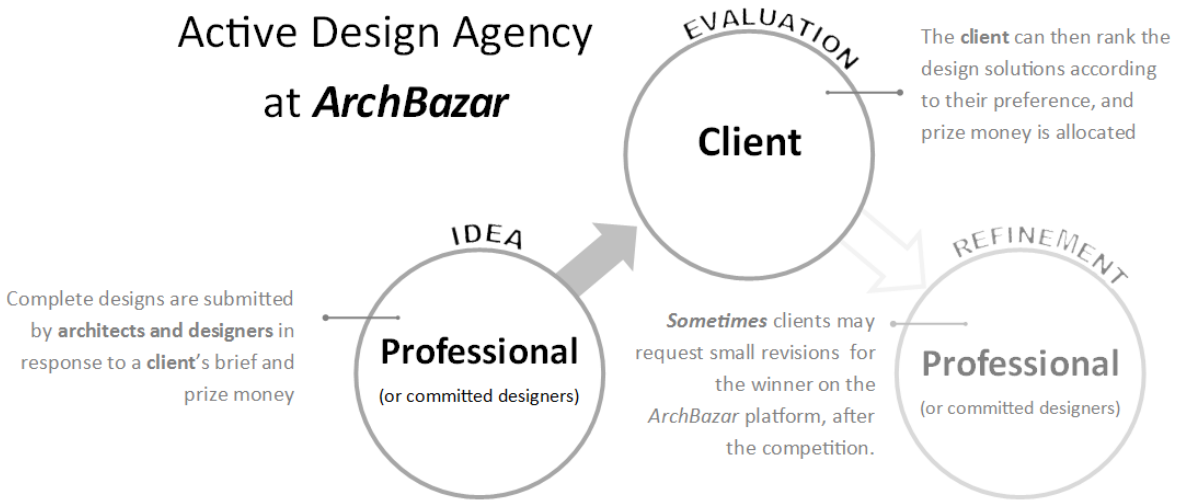

Figure 8, Active design agency at ArchBazar (own illustration)

Other related sites include *Kickstarter* (launched in 2009), where members of the public are invited to each provide an investment to fund a project that they would like to see realised. Here the 'open call' is relatively undefined, thereby increasing the number of potential investors. Funded Kickstarter projects include '+Pool'[175] and 'Lowline'[176] – both proposed developments in New York. However the public were not facilitated in actively participating throughout the design of these projects, but rather they were given the opportunity to share and participate in another person's vision. 'Crowdfunding' (as it has been termed) represents a notable decentralisation of the power to influence the urban landscape by allowing the public to generate capital where it might not have otherwise existed, and signaling to planners from the outset that there is public interest, which may not have otherwise been apparent. But as far as Hayek's convictions are concerned, this system falls far short of effectively organising around 'constantly communicated and acquired' public

[175] '+Pool, Tile by Tile', *Kickstarter* <https://www.kickstarter.com/projects/694835844/pool-tile-by-tile/video_share> [accessed 19 April 2015].
[176] 'LowLine: An Underground Park on NYC's Lower East Side', *Kickstarter,* <https://www.kickstarter.com/projects/694835844/pool-tile-by-tile/video_share> [accessed 19 April 2015].

input, through a consequently self-organising process of design.

However crowdfunding platforms are now emerging that specialise in architectural projects and these do to some extend facilitate a design process. *Projexity* is one such site launched in 2013. The design process comes in the form of an architectural competition, with an entry fee that 'helps to ensure that only committed designers participate, which in turn ups the level of work that gets submitted.'[177] But although public voting does form the final basis of selection, a continued process of internal incrementalism or iterative design is not clearly supported. Since the end of 2014 through to 2015, however, *Projexity* has displayed a 'coming soon' message stating in earnest, 'We're improving the way you showcase your awesome urban projects and engage your audience.'[178] Figure 9 illustrates this distribution of design agency.

[177] 'Design Competitions', *Projexity,* <https://projexity.com/about/competitions> [accessed 20 April 2015].
[178] 'We're Making Some Ch-ch-ch-ch-changes', *Projexity,* <https://projexity.com/#> [accessed 20 April 2015].

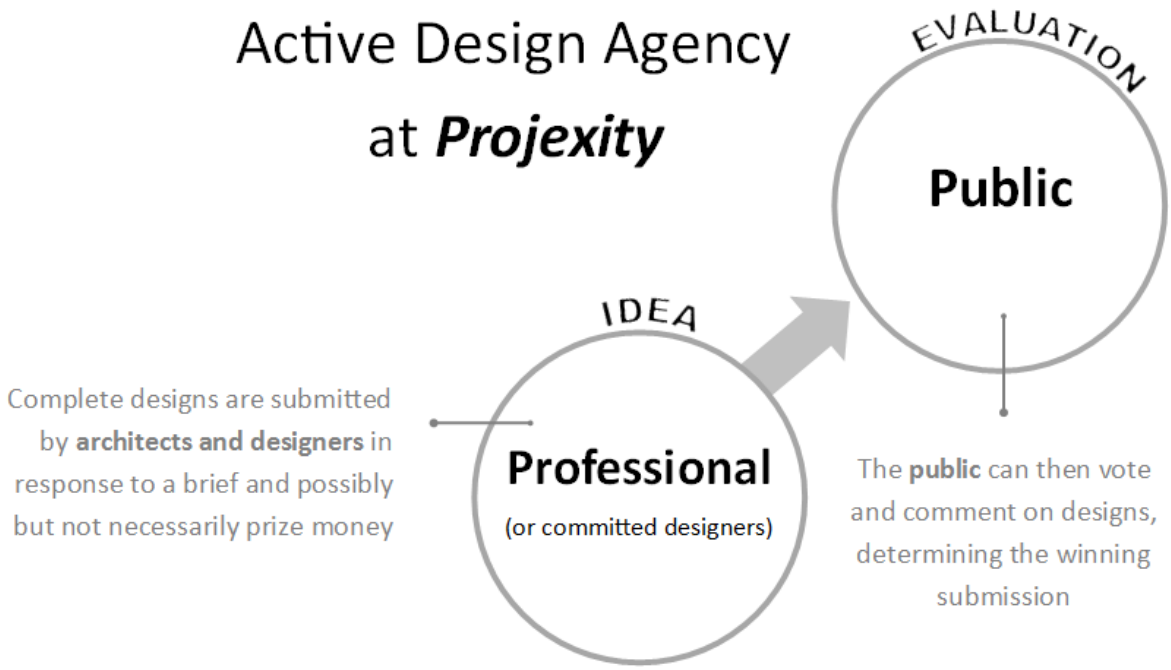

Figure 9, Active design agency at Projexity (own illustration)

Spacehive (launched in 2011) is another architectural crowdfunding site with similarly limited participatory design facilitation, and with project categories that appear to exclude explicitly commercial projects such as retail.[179]

In all of these examples it is conceivable that popular public request, perhaps in the form of comments, could sway or influence a project. However, in spite of the convenience of web-based technology and the potential for large-scale public input, there is little difference here (in terms of the fundamental locus of design agency) to conventional public consultation meetings. As acknowledged by architectural theorists and practitioners, such as Jeremy Till and Peter Blundell Jones, what is regarded as public participation in the process of architectural design is all too often token, even seen as 'another box among many to tick in

[179] *Spacehive,* <https://spacehive.com/> [accessed 19 April 2015].

order to get approval and funding.'[180] In Till's essay, 'The Negotiation of Hope' a 2003 consultation meeting for an urban regeneration project is described. As part of the Labour government's *New Deal for Communities* (NDC) program public participation was a necessity. However Till argues that the word 'participation' is accepted here uncritically. He describes an NDC officer, burdened with centralised targets and procedures, dragging 'a response from a stultified audience' about an architect's drawings 'that no-one can really see', all so that 'participation could now be deemed to have happened, and the political process of regeneration could move on.'[181] While this is an intensely dreary description, consultation or sentiment gathering as the means of public participation can certainly result in conflicts and challenges that are difficult to overcome.

As a recent example, in 2012 a multi-million pound proposal for the regeneration of Hawley Wharf, Camden, was rejected 'amid public outcry over the size and impact of the scheme'.[182] The developers had misjudged public sentiment despite numerous consultation meetings taking place at least since 2009[183] (including a three-day public exhibition in 2010).[184] In April 2014 it was announced that three business partners had pulled out of the scheme and sold their stakes to another developer 'without a brick being laid.' Concerns

[180] Blundell Jones, Petrescu, Till, p. xii.
[181] Jeremy Till, 'The Negotiation of Hope', in Peter Blundell Jones, Doina Petrescu and Jeremy Till (eds), *Architecture and Participation* (London: Spon Press, 2005), pp. 19-21.
[182] Tim Lamden, 'New £300million Hawley Wharf development for Camden Town approved', *Ham&High*, November 2012, <http://www.hamhigh.co.uk/news/new_300million_hawley_wharf_development_for_camden_town_approved_1_1726828> [accessed 14 May 2015].
[183] Paul Keilthy, 'Developer's Heart Transplant Bid', *Camden New Journal*, October 2009, <http://www.thecnj.com/camden/2009/101509/news101509_06.html [14/05/2015> [accessed 14 May 2015].
[184] Dan Carrier, 'New Tower "Will Dwarf The Hawley Wharf Skyline"', *Camden New Journal*, November 2010, <http://www.camdennewjournal.com/news/2010/nov/new-tower-%E2%80%98will-dwarf-hawley-wharf-skyline%E2%80%99> [accessed 14 May 2015].

were subsequently expressed by a councilor involved with the project urging 'the new owners not to rip anything up and start again.'[185]

E-Participation
2.4

Nevertheless Till's 'Negotiation of Hope' and the case of the Hawley Wharf development do appear to highlight circumstances that could have been improved by a more effective commenting and sentiment gathering system. During correspondence with David Janner-Klausner (the Business Development Director of *Commonplace*, founded in 2013) this was described as the kind of circumstance where their service might be most useful (see Appendix 4). As part of a steady movement towards electronic participation in planning issues, the idea for *Commonplace* is that the public can use smartphone software to position and map comments relating to specific parts of their neighborhood, describing areas that they like or dislike, and things that they want improved. Users can up-vote other people's comments to establish a measure of importance, and the platform can also be used to present certain options in order to gain feedback about potential future developments.[186] An illustration of architectural agency through Commonplace is provided in Figure 10.

[185] Dan Carrier, 'Hawley Wharf development site sold before a brick is laid', *Camden New Journal*, April 2014, <http://www.camdennewjournal.com/news/2014/apr/hawley-wharf-development-site-sold-brick-laid> [accessed 14 May 2015].
[186] David Janner-Klausner, (Phone interview, 30 January, 2014).

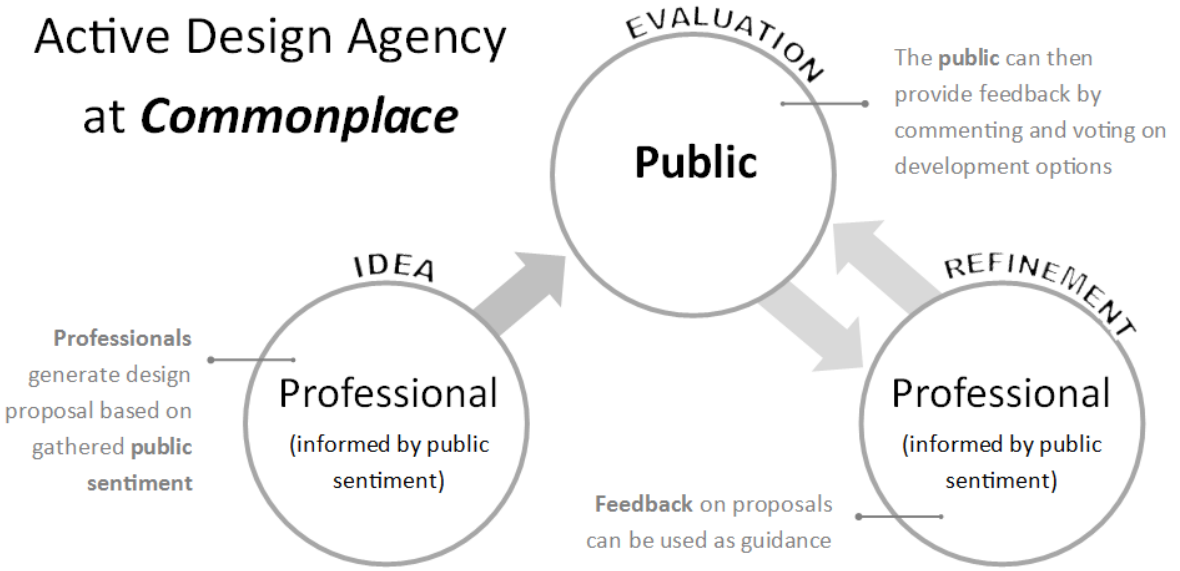

Figure 10, Active design agency at Commonplace (own illustration)

Other platforms that work on a similar logic include *Neighbourland* (2011),[187] which additionally makes use of traditional sentiment gather tools such as physical comment boards; and *Textizen* (2012),[188] which uses public signage to encourage citizens to send opinions through mobile phone text messages.

These services digitise the consultation process, arguably making it easier to reach out to more people more frequently, yet they do not fundamentally or theoretically change the public participation process. Plans are drawn up while hopefully attaching enough importance to gathered public sentiment, and the actual activity or locus of design takes place exclusively to the 'participants', by developers and designers who can only work by their Hayek opposed interpretations of many other people's opinions. These systems still leave room for the political circumstances described by Till, with public consultation viewed

[187] *Neighbourland,* <https://neighborland.com/> [accessed 19 April 2015].
[188] *Textizen,* <https://www.textizen.com/> [accessed 19 April 2015].

as a tick box exercise and legislative requirement rather than a genuine investment by developers in achieving public satisfaction.

In other words, conventional market research is the extent to which social media tends to support large-scale public participation in the design of the built environment. Yet even decades ago Giancarlo De Carlo suggested in his milestone 1969 lecture:

> Planning of cities and regions tends to fail even when drawn up according to the most conscientious analyses and accurate forecasts, and even when collective interests have been carefully considered.[189]

De Carlo discussed the 'quality of consensus', contrasting the preferable concept of planning *with* to planning *for* people. As described more recently by Till and further echoed by Peter Blundell Jones in his article 'Sixty-eight and After', the latter circumstance often prevails[190] despite the intervention of government policy. In this context Height and Perry's statement that 'architecture has been comparatively slow to understand the full potential of telecommunications',[191] hints to a political circumstance in which architectural agency remains primarily centralised, despite the gradual implementation, demonstrated commercial advantage, and participatory potential of web-based technology. Public sector or non-commercial projects may extend meaningful gestures and intentions for public participation (including prospective projects hosted on sites like *Spacehive*), but in the commercial context of retail design mainstream participatory processes are still framed by

[189] Giancarlo De Carlo, 'Architecture's Public', in Peter Blundell Jones, Doina Petrescu and Jeremy Till (eds), *Architecture and Participation* (London: Spon Press, 2005), p. 13.
[190] Peter Blundell Jones, 'Sixty-eight and After', in Peter Blundell Jones, Doina Petrescu and Jeremy Till (eds), *Architecture and Participation* (London: Spon Press, 2005), p. 140.
[191] Hight, Perry, p. 4.

centralised design practise.

Community Architecture
2.5

Commercial motives for participation require that the ends (appropriate design outcomes translated into greater returns on investment) justify the means (the mode by which consumer preference and appeal are gauged and captured). Therefore a distinguishing feature of commercial participatory practice is that it must be effective, preferably in improving consumer enjoyment in the wider market and not only to the consumers who will have formed a participant sample. Conversely end-user participation in non-commercial contexts can be just as motivated by the basic idea that people should have a hand in shaping their environment; by the sense of inclusion and involvement that may result (for those who take part), regardless of any absolute improvement in the design outcome. As Till describes, community architecture, in which the users are 'seen to have control over their environmental destiny in a truly democratic manner',[192] can run the risk of falling foul of genuinely improving design, despite the prevalence or conviction of its proponents.

> My argument is that community architecture, through its dialectic genesis, suffers from the fate of all binary argument, namely that it never succeeds in reformulating the original points of opposition, but is in fact caught within their ideological structure.[193]

Till argues that the persisting myth of the authoritarian architect 'bears little resemblance to actual practice' where there is an 'imperative for most architects to listen to and work

[192] Jeremy Till, 'Architecture of the Impure Community', p. 61.
[193] *Ibid*, p. 71.

with the client and end users.' The impression that community architecture, in opposition, is capable of improving matters by divesting greater power amongst the 'impure community' (seen as heterogeneous, contingent, and individually 'selfish') is described by Till as having 'hardly served the people very well, resulting in an emasculated version of architecture reduced to the lowest common denominators of style and technique.'[194]

On the other hand, participatory practice in the commercial context of retail goes as far as is deemed effective in improving general consumer reception. The approaches of *IDEO* and *Sheridan & Co* lend themselves as examples. Yet an element of decentralisation is recognised by Till:

> One of the defining features of recent practice has been the speed at which the relationship of architect to client has changed, particularly in the commercial field. The notion of the architect presenting a fait accompli to the client has been replaced by the architect bending to the demands and needs of the client and end users. In this light the difference between the commercial architect and the community architect is perhaps less than the ideologues of community architecture would have us believe, even if the criteria by which the eventual designs are judged 'better' are centred around economic criteria in one instance and social criteria in the other.[195]

Given this trajectory, drawing on the seminal 1988 research of Robert Gutman,[196] and in the context of the shared and long standing consumer-focused trend mapped in Chapter One, it seems conceivable (if not probable) that the general distribution of architectural agency will continue to decentralise; driven by competitive necessity, changing consumer culture, and facilitated by advancing web-based technology. The missing element in this

[194] *Ibid*, p. 73.
[195] *Ibid*, p. 70.
[196] Robert Gutman, *Architectural Practice: A Critical Review* (Princeton Architectural Press, 1988).

discussion is a critical evaluation of whether further decentralisation may occur in quite the same way, in light of the uniquely political context of architecture and urban planning in which Non-plan theory was conceived.

This chapter has explored contemporary approaches to participatory architecture against the backdrop of mass-participatory consumer goods. Web-based approaches to participatory architecture are summarised below.

CATEGORY	DESCRIPTION
CROWDSOURCING	Allows anybody to submit a brief for a design project. Typically members of the public are not involved or invited into the design process (in contrast to the original crowdsourcing definition given by Jeff Howe). Example architectural crowdsourcing platforms include *Archbazaar*, *CoContest* and *Prodigy Design Lab*.
CROWDFUNDING	Typically requires public participation, but only to generate capital for projects. Where public design input is facilitated, this is often limited to casting votes on provided designs. Examples platforms include *Kickstarter*, *Projexity* and *Spacehive*.
E-PARTICIPATION	Brings the traditional market research and consultation process into the realm of social media. Participants cast

	votes and comments online. Example platforms include *Commonplace*, *Neighbourland* and *Textizen*.
MASS-PARTICIPATORY DESIGN	Public participation can take place on a magnitude of hundreds to thousands of individuals (or more), actively participating in the formal design process. Participants are supported in a self-organising process, which may simply take the form of browsing and building on each other's work. Example platforms in the consumer goods industry include NikeID (also referred to as a mass-customisation platform) and Quirky. Emerging examples in the field of architectural design will be discussed in Chapter Three, The Politics of Mass-participatory Design.

It has been argued in this chapter that market research is most often the tokenistic framework by which consumer participation takes place in retail architecture. Referring to the work of Jeremy Till this chapter has drawn a distinction between the underlying motives of consumer participation, both in commercial and community contexts. Effectively, Till's notion of the 'impure community' introduces an explanation for commercial architecture's rejection of active consumer design agency. This concept of heterogeneous public interest, coupled with architecture's centralised commercial design approach, will form vital elements in the conclusion of this thesis. These will also be carried forward in the following chapter (Chapter Three), providing an investigation into the political implications and potential commercial consequences of mass-participation architecture.

THE POLITICS OF MASS–PARTICIPATORY DESIGN

3.0

'I do believe that architects will get it, and they will see commercial sense in it – and they'll see intellectual sense in it too, in the way that a product designer sees.'[197] Stated Michael Kohn (Architect, founder of *Slider Studios*, and CEO of *Stickyworld*) in a March 2014 *Skype* interview (see Appendix 2). He described a 'time lag', mentioning that perhaps his company built their mass-participatory design tool *Stickyworld* too early for the architectural design industry – given the attention traction the platform is currently receiving. *Stickyworld*'s projects have so far ranged from neighborhood planning to cultural buildings such as the *London Design Museum*, and Kohn explains:

> We are working on a number of proposals for retail and leisure - my gut feeling is that the future of physical retail is about getting closer to the customer and giving them the opportunity to have a say in the experience they pay for.[198]

Kohn built *Stickyworld* on the aspiration of 'lean architecture' (lean, referring to minimum viability with 'fast feed-back cycles'). As a web-based service *Stickyworld* allows the potential for consumers of architectural projects to post virtual sticky notes on top of a range of visual content. The idea is to allow questions to be asked and open discussions to take place while providing valuable feedback for the design team, guiding and informing consumer targeted development. Distinguishable from the web-based architectural initiatives previously discussed, Kohn mentions how *Stickyworld* has been designed with the potential to allow architectural end-users to upload their own ideas in the form of visual content (in a similar way that *Quirky* engages their consumer community). Yet, while it may

[197] Michael Kohn (Skype interview, 6 March, 2014).
[198] Michael Kohn (Email correspondence, 21 January, 2014).

have been an intention during the development of the web-based software, this freedom is at the discretion of the clients of *Stickyworld* (not necessarily the architect) who have so far opted to disable this function, limiting consumer input to text based sticky notes. Kohn explains:

> One of the constraints of *Stickyworld* is the level to which you can engage and participate depends on the person organising […] They haven't set it up that way, but they could do. I think it's just a matter of time.[199]

Ultimately, he explains 'You need to go at the pace of the customer' (referring to *Stickyworld* clients as opposed to architectural end-users).

Yet resistance also comes from the architects themselves. The work of John Pawson (known for his clean, white, minimalist style) has been repetitively met with constructive criticism on *Stickyworld*, showcasing the prospective designs for the planned relocation of the *London Design Museum* in 2016. 'Everything is so Beige. I would have expected a bit more variety from a design museum.'[200] Reads one sticky note. 'It is a big space - but I feel a lack of colors all around the place.'[201] Reads another. However the responses to these comments did not come from the design team (having been inactive on the *Stickyworld* platform) but instead they came from the communications coordinator at the museum. Her responses often centered around the point that the images 'are not meant to be exact

[199] *Ibid*.
[200] Gabrielle D'Ayr, comment on 'Dais, stairs to first floor', *Stickyworld* <https://designmuseum.stickyworld.com/room/presentation?roomid=38#notes/1690> [accessed 20 May 2015].
[201] Eduardo Zanelato, comment on 'Second Floor, Permanent Gallery Side', *Stickyworld* <https://designmuseum.stickyworld.com/room/presentation?roomid=38#notes/1733 [14/05/2015> [accessed 20 May 2015].

representations of what the new *Design Museum* will look like, but rather give visitors an idea of the space and stimulate conversation'[202] (not entirely indicative of Kohn's aspiration of lean architecture). It remains to be seen whether this consumer input will be taken on board by the designer whose personal style appears to be in contrast to what others were hoping for. This apparent relationship, between the public and professional agents of the *Stickyworld Design Museum* project, is depicted in Figure 11.

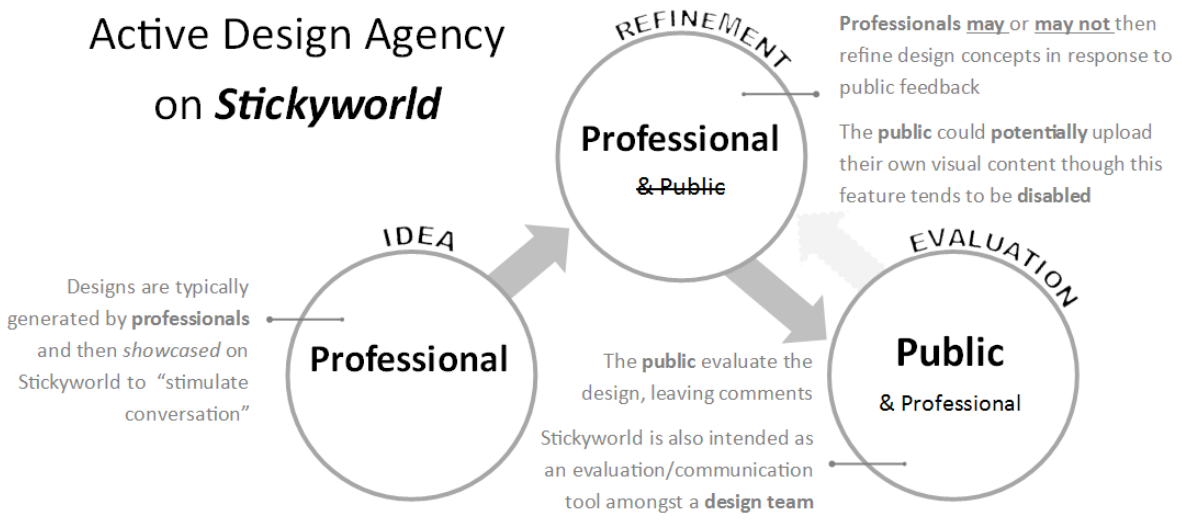

Figure 11, active design agency on Stickyworld (own illustration)

Institutional resistances, both from the variable conceit of the architect or the controlling command of the client, consequently appear to represent significant hurdles to the genuine implementation of mass-participatory architectural practice. The immediately apparent motivations behind both are similar, as central attempts at quality management, but the former additionally carries the clear baggage of professional preservation.

[202] Giulia Ascoli, comment on 'Stair to second floor', *Stickyworld* <https://designmuseum.stickyworld.com/room/presentation?roomid=38#notes/1678> [accessed 20 May 2015].

This chapter explores these political and architectural implications, drawing from mass-participatory principles highlighted in Chapter One (minimum viable design agency and the benefits of market prediction and rapid productivity). These principles will be attached to a political discussion in the following three sections, each focusing on the agency of the professional designer, the client, or of the public; and in each case the political context of commercial architectural will be compared to that of consumer goods. Ideas from Till's 'impure community', presented in Chapter Two, will be woven into this discussion and therefore key concepts from the previous chapters will be organised and evaluated.

The first section ('Architectural Authorship') will focus on the agency of the professional designer, considering the immediate difficulty and conflicts of interest in implementing a 'minimum viable' architectural approach. It will be argued that resistance to mass-participatory practice from the architect is in fact shared by the professional designers of consumer goods. The consumer goods industry will therefore provide relevant cases (such as *Procter & Gamble*) where this professional resistance is being overcome by commercial imperative, but also where a lingering conflict has hindered successful mass-participation. Insight will therefore be transferred from the consumer goods industry (given its myriad practical examples and position at the forefront of mass-participatory design) regarding the motives and consequences of professional resistance to mass-participatory practise.

The second section of this chapter ('The Client's Control') will focus on the financial interests of the client (or company in the case of consumer goods), exploring the political and commercial limitations of 'market prediction'. The idea of heterogeneous interest will be

explored through a deeper investigation of the activities of *Threadless* (in its attempt at physical retail) and *Quirky,* highlighting clashes between company and community intentions. These will give further insight into the politics of mass-participatory design, and provide a basis for interrogating the heterogeneous interests of commercial architecture.

The case of the *Hawley Wharf* development will form an argument where conflicts can be far greater and more complex than those in consumer goods, and this will lead into the final section of this chapter ('Architectural Complexity'). The focus will shift to the complex agency of the public, and the challenge of utilising 'rapid productivity' in the field of architectural design. The illusive nature of architectural consensus will be critically considered, while the approach of the mass-participatory design platform *BetaVille* will be introduced as a significant step towards overcoming this challenge. The case of *Stickyworld*'s London *Design Museum* will then be revisited, helping to summarise the potential benefits and ultimate limitations of objective 'frameworks for decision' for commercial architecture.

The purpose of this chapter is therefore to pull together a discussion of the different agencies in design, their variety of interests both social and economic, and set this against the underlying theories and assumptions of Non-plan. With the mass-participatory activities of the consumer goods industry acting as successful, practical examples of Non-plan's 'frameworks for decision', a comparison of the political contexts of both commercial architecture and consumer goods will facilitate a contemporary evaluation of Non-plan theory, gauging its architectural applicability in the age of social media.

Architectural Authorship
3.1

As explained in Mario Carpo's introduction to *AD*, 'The Digital Turn in Architecture 1992-2010';

> Individual authorship has long been such an essential aspect of modern architecture that one can easily understand the mixed feelings of the design profession vis-à-vis a techno-social development that many feel might threaten or diminish the architect's traditional authorial role.[203]

I asked Kohn in our discussion why there seems to be far more willingness to engage in decentralised consumer-driven design in the product development industry, and one of the answers that he gave (in addition to describing a 'time lag') was that there appears to be 'a cultural barrier' in 'the way that architecture also crosses arts, in everybody's mind, not just an architect's'.[204] Effectively, if architecture could be seen less as an *art* there would be less of an inclination for the designer to impose their personal style or bias into a building, over a decentralised consumer-driven approach. Kohn's 'time lag' describes an industry that appears to be moving in this direction (this is 'our gambit' he mentions) and by many accounts this transition is likely to take place. As Carpo continued to explain 'mass participation, may be more disruptive for architectural production' in this digital age than the parametric modelling software 'to which we are now almost getting accustomed'.[205]

Nevertheless there is still uncertainty in terms of the extent that architectural authorship may be undermined by this transformation. Chapter One has identified elements of

[203] Mario Carpo,'The Digital Turn in Architecture 1992-2012', *AD Reader* (John Wiley & Sons, 2012), p. 13.
[204] Kohn (Skype interview, 6 March, 2014).
[205] *Ibid*.

centralised design agency that can be pivotal in facilitating effective mass-participation, ensuring minimum viable requirements upon which decentralised input can be built or negotiated. This highlights a lower boundary for acceptable centralisation, but not an upper boundary (a rough maximum for acceptable centralisation and authorial input that can still support effective mass-participatory design).

Randy Deutsch, architect and associate professor at the University of Illinois at Urbana-Campaign, identified in his 2014 *Design Intelligence* article a faulty or 'mistaken' belief that an architect should be central to the decision-making process.[206] He suggested that better decisions could be derived through the involvement of more people and therefore through a necessary relinquishment of architectural authorship. Conceit and conversely fear that 'we and our work will be mediocre' in the context of wider collaborations are described as barriers to this transformation. Yet the single biggest issue described by Deutsch was 'how to pose problems and opportunities in forms that will elicit and inspire a collaborative response.' This is echoed by Kohn who mentions 'we've learnt through various iterations of our platform that that's what's effective […] you need a good question and people will engage' Yet he further explains:

> Not everyone can do that [...] Do people who are creating content know how to ask questions about that content? Maybe you do need a third party, like a PR, communications, or engagement professional to use it, because they don't have such a vested interest in the content that's being discussed.[207]

[206] Randy Deutsch, 'How We Can Make Collaboration Work', *Design Intelligence*, February, (Greenway Group, 2014) <http://www.di.net/articles/how-we-can-make-collaboration-work/> [accessed 16 January 2015].
[207] Kohn (Skype interview, 6 March, 2014).

It is suggested that this vested interest, the preservation of authorial agency, has the potential to impede effective engagement of the public in a productive discussion.

This is in fact evident from the consumer goods industry, benefitting from clear examples such as the case of *Procter & Gamble*. The pretense has been described by Jeff Howe in his 2008 book, 'Crowdsourcing':

> Until recently, *P&G*'s corporate culture was notoriously secretive and insular: if it wasn't invented in-house, then it didn't exist. That worked fine for the first 163 years of *P&G*'s history, but by mid-2000 the company's growth had slowed and its ability to innovate and create new products had stagnated.[208]

Howe explained that this was a significant signal for *P&G* to dramatically change the way that they functioned. The *Connect and Develop* initiative was subsequently launched to dramatically increase the proportion of products and initiatives that originate form external collaborators. More recently, in 2013, the company made the *Connect and Develop* process easier by launching a web platform with the explicit intention to 'speed and simplify external innovation connections […] linking innovators directly to top company needs.'[209] Importantly the *Connect and Develop* initiative was set up primarily to target individuals or other organisations with scientific or engineering expertise, rather than consumers in the general public. *P&G* did, however, attempt to launch a truly open mass-participatory design platform in 2013 (*The P&G Co-Creation Channel*),[210] where, 'creative consumers'[211] could

[208] Jeff Howe, 2008, pp. 9-10.
[209] Lisa Popyk, 'P&G Connect+Develop Launches New Open Innovation Website.' *Procter and Gamble*. 7 February 2013, <http://news.pg.com/press-release/pg-corporate-announcements/pg-connectdevelop-launches-new-open-innovation-website> [accessed 14 May 2015].
[210] *P&G Co-creation Channel*, June 2013, <https://www.cocreate-pg.com/start.php> Internet Archive <http://web.archive.org/web/20130609053752/https://www.cocreate-pg.com/start.php> [accessed 13 February 2015].
[211] 'About', *P&G Co-creation Channel,* <https://www.cocreate-pg.com/info.php?ID=46> [accessed 13 February 2015].

submit ideas, vote, and compete for approval. However the website didn't even achieve enough public interest to feature at all in *Google Trends*, and at least since early 2014 the website has inexplicably gone offline (with several dead links still featuring on the *Connect and Develop* website in 2015).

P&G's corporate culture, as a company that has been in business for over 175 years,[212] appears to differ stubbornly from a company like *Quirky*. As Kaufman puts it, unlike *P&G*, at *Quirky* there is no ego to get in the way of consumer-generated design. He mentions:

> One of the things I saw in *P&G* was that the guys that run the platform where people can submit ideas on *P&G* don't want to go to their brand manager and say, 'Guess where I got this idea? From the Internet.' They're supposed to be the ones coming up with the ideas.[213]

To quote Grinyer again from his 2009 *TEDx* talk, 'The Democratisation of Design': 'Wait a minute, we used to do that, and now all the users are coming in and tell us what to do, and this is developing an uncomfortable relationship,' but Grinyer continues, ' as well as being an incredibly powerful source of insight.'[214] But it is the mixed feelings of this begrudging necessity that appear to have been *P&G*'s downfall. The words, 'company needs'[215] feature prominently in much of the information that *P&G* has provided about their web-based platforms.[216] Yet, having coined the term crowdsourcing (which *P&G* use to describe their online initiatives) Howe states that the biggest mistake that companies make is focusing on

[212] Irwin Lee, 'The heart of our business model for 175 years' *Procter & Gamble,* <http://www.pg.com/en_UK/news-views/Inside_PG-Quarterly_Newsletter/issue7/innovation.html> [accessed 27 January 2015].
[213] Ben Kaufman, interviewed by Peter Diamandis.
[214] Grinyer, 00:19:47.
[215] Popyk, 2013.
[216] *P&G Connect & Develop,* [http://www.pgconnectdevelop.com/] <accessed 27 January 2015>.

what the masses can do for them, and not so much on what the company is doing for the masses.[217] The diagram in Figure 12 represents the design agency at *Co-create P&G*.

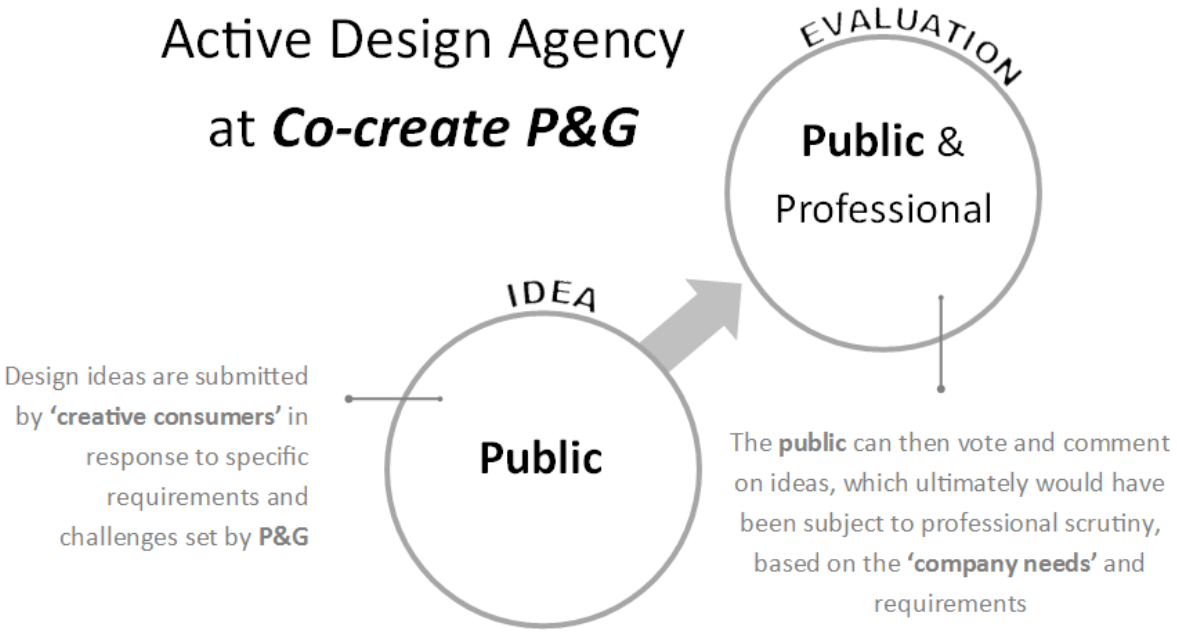

Figure 12, Active design agency at Co-create P&G (own illustration)

Effectively *P&G* failed in Deutsch's heed to 'pose problems and opportunities in forms that will elicit and inspire a collaborative response.'[218] The company's first significant attempt at mass-participatory design illustrates how vested authorial interests (those described by Kohn) can dramatically hinder public engagement. People need to be inspired to participate, and it appears that the most effective platforms either provide tailor-made product offerings or (more applicably) balance proportional or potential, arguably fair financial reimbursement with community fame and authorial recognition. Referring to *Threadless*, Howe described this as the 'reputation economy.'[219] *Quirky* also recognises the

[217] Jeff Howe, 2008, pp. 287-88.
[218] Deutsch, 2014.
[219] Jeff Howe, 2008, p. 3.

original submitter of a successful product concept as the inventor and ensures that their name, picture, and perhaps more crucially, the number of influencers is printed on every box.[220] Members of the open community also rack up points in terms of the number of ideas submitted, the number of products they have influenced, and their total cash earnings, displayed on their *Quirky* profile. On average, every product has been developed by a collaboration of 1200 community members.[221] By contrast the short-lived *P&G Co-creation Channel* appeared to only pit participants against each other through competitions with relatively stringent requirements, and with relatively little functionality to facilitate a collaborative design environment.[222]

Effective mass-participatory design demands some degree of distributed authorship and recognition, and as indicated by the developing case of *P&G*, steadfast centralisation must at some point give way to economic pressure. Nevertheless, a significant element in this discussion has been overlooked. Professional authorship has been considered in isolation on the agency of the client. Yet according to Till's argument in Chapter Two, the former is often subservient to the latter, and as demonstrated by the case of *Stickyworld,* architectural clients have in fact opted to significantly limit consumer input. The authorial agency of the architect is thereby enforced by the underlying motives and intentions of the client. This therefore becomes a vital point of investigation, to better understand the possible effects of a mass-participation transition on architectural agency.

[220] 'pbQ/2.0 | FAQ's.' *Quirky,* <http://community.quirky.com/t/pbq-2-0-faqs/1147> [accessed 14 May 2015].
[221] Ben Kaufman, Interviewed by Peter Diamandis.
[222] *P&G Co-creation Channel,* 2013, Internet Archive.

The Client's Control
3.2

As Till explained in 'Architecture of the Impure Community', by contractual agreement professional architects must frequently bend to the will of their clients, 'not to do so would be commercial suicide.'[223] With this understanding clients maintain control that to a certain extent must be relinquished to facilitate non-tokenistic mass-participatory design. According to *Wolff Olins* and *Flamingo's* 2013 Game Changers report, anxiety over loss of this control is the key element that holds business in general back.

> In our conversations with business leaders we've been hearing a sense of uneasiness about 'giving up control to consumers' in the age of social media. Some are embracing it, finding new ways to connect with their consumers on an individual level — but most are nervous at the thought of their consumers being in charge of their brand.[224]

The entire report focused on explaining to companies the importance of changing the way they function in order to stay relevant in the 'post-consumer world'; where customers are increasingly given platforms and the ingredients to 'adopt, adapt and improve' a company's brand.

However a direct translation into an architectural context would appear to be problematic. A useful architectural case has been provided by the attempted retail operations of the consumer goods company *Threadless*. In 2007 the company opened their first branded retail outlet in Lakeview, Chicago (although management preferred to refer to it as a

[223] Jeremy Till, 'Architecture of the Impure Community', p. 70.
[224] Wolff Olins & Flamingo, 'Game-Changers', 2013, <http://gamechangers.wolffolins.com/> [accessed 20 February 2014].

community center,[225] with profit supposedly not being the main objective).[226] Significant effort went into ensuring that the store remained true to the company's brand identity (originality and independence), and each week a graffiti blend of the most popular community generated designs would decorate the walls. After the store proved to be a profitable venture, however, the company began planning the development of a chain of stores across the country[227] though this was met with displeasure by certain members of the *Threadless* community. 'Please promise me that this will be the ONLY store you will be opening...I'd hate for a franchise to saturate the market... It kinda takes away from being genuine'[228] displayed one comment on *Threadless's* store announcement page. The title of another post on a *Threadless* fan website read, '*Threadless* to Launch Retail Stores, Everybody Panic…'[229]

Unfased, however, the founder and CEO Jake Nickell (in an interview for *Inc. Magazine*) gave the analogy of a popular new band, the core fan base of which moves on as the band becomes mainstream.[230] This analogy ultimately falls down, however, in the sense that in addition to acting as consumers *Threadless's* enthusiastic fans additionally form the company's sole production team. Interestingly, *Google Trends* reveals that towards the end

[225] Sandra Jones, 'Threadless tests chain store waters', *Chicago Tribune*. 12 August 2010, <http://articles.chicagotribune.com/2010-08-12/business/ct-bis-0813-notebook-retail-20100812_1_threadless-jake-nickell-t-shirt> [accessed 27 January 2015].
[226] Max Chafkin, 'The Customer is the Company', *Inc Magazine*, June 2008, <http://www.inc.com/magazine/20080601/the-customer-is-the-company.html> [accessed 27 January 2015].
[227] *Ibid*.
[228] 'Threadless Store Grand Opening and Grand Opening Party!!', *Threadless*, August 2007, <https://www.threadless.com/infoblog/249263/announcing_the_chicago_threadless_store_grand_opening_and_grand_opening_party?page=3> [accessed 7 March 2015].
[229] 'Threadless to Launch Retail Stores Everbody Panic', *Love's Threadless*, December 2006, <http://www.lovesthreadless.com/2006/12/11/threadless-to-launch-retail-stores-everybody-panic-etc-etc/> [accessed 7 March 2015].
[230] Chafkin, 2008.

of 2006 search engine interest in *Threadless* spiked (see Figure 13). This coincided with media buzz along with word of mouth about potential plans to open up a physical retail outlet in the following year.[231] Since then however, search interest in the company has diminishingly fluctuated. The company's plans for retail expansion have subsequently stalled, and in January 2014 the *Lakeview* store closed down along with the cancelation of plans for other branded retail outlets. Nickell announced that the company now plans to 'focus our attention toward our technology platform in order to better serve *Threadless* artists, our community, and design submission and sharing.'[232]

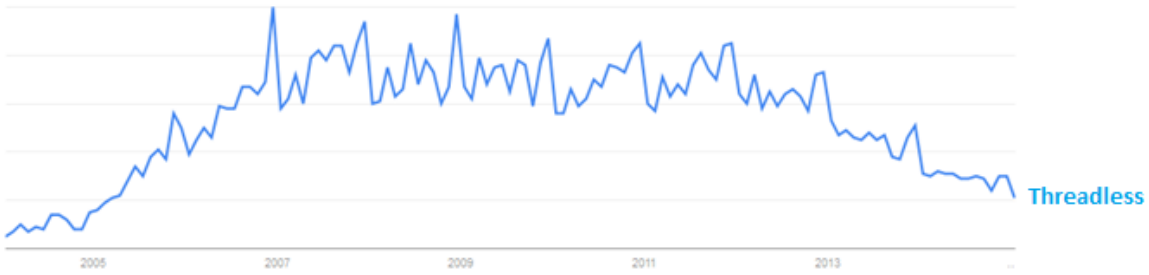

Figure 13, 'Threadless' search popularity (worldwide), Google Trends, http://www.google.co.uk/trends/

These tensions between company interest and consumer engagement highlight trade-offs presented by an open community, and limits in terms of centralised control while still eliciting mass-participatory input. This case only describes two clearly opposing opinions or motivations, between community and company. However the reality of much architectural

[231] Scott Smith, 'Threadless Goes Offline', *The Chicagoist*, January 2007, <http://chicagoist.com/2007/01/10/threadless_goes_offline.php> [accessed 20 March 2015].
[232] Jake Nickell, interviewed by John Plets, 'Threadless lays off 27% of staff, shifts strategy' *Chicago Business*, January 2014, <http://www.chicagobusiness.com/article/20140112/BLOGS11/140119968/threadless-lays-off-27-of-staff-shifts-strategy> [accessed 27 March 2015].

development, particularly large commercial complexes and retail districts, is that myriad varying interests, motivations, opinions and inclinations will exist *within* the community. This heterogeneity cannot be escaped by simple means of product segmentation and consumer choice (as in the manufacture of consumer goods), and to an extent this appears to have been *Threadless's* oversight.

Retail buildings (and of course buildings in general) are produced in a specific place, at a specific time, and are inevitably consumed by a broad mixture of people: the consumers that may be intended customers, segments of the local community who may or may not fall within the company's target market, and frequent visitors to a city who may also fall outside of the company's direct commercial interests. Some of these actors may lie in fundamental opposition to a retail developers architectural intentions (the opposing public) while others may be in favour of commercial development, and potentially willing to engage in constructive mass-participatory design (the supporting public). The former group would be vital to appease only in so far as obtaining planning permission, while the latter constitute the key economic focus of the mass-participatory design imperative described in the consumer goods industry. Relinquishing control to an indiscriminately open community allows (and perhaps more importantly inspires) opposing actors to exert influence and control in ways that may very well hinder the commercial intentions of the architectural investor.

In this context, loss of control to a politically charged open community can be seen as undermining the commercial imperative towards decentralised, consumer-driven design.

Selective research-driven design appears to be the limit by which consumer preference can be gauged and fulfilled, without also endangering the financer's chances of maximising their return on architectural investment. Effectively the usefulness of 'market prediction' in a commercial context relies on being able to target the appropriate consumer group. Yet while this conundrum is mostly applicable to the field of architecture, mass-participatory practice in the development of consumer goods can also run up against fundamental conflicts of interest. In fact observation of these instances can provide clues as to how the discipline of commercial architecture might attempt to adapt to the tools of mass-participation, by augmenting the mechanics of mass-participatory design platforms in order to better serve commercial interests.

Quirky's President, Doreen Lorenzo, revealed in an interview for the *Wall Street Journal* in 2014 that their community voting system can be swayed by selfish interests and widely held misconceptions. Apparently, this is influenced by products that *Quirky* has previously approved.[233] Each community member earns a fraction of the revenue generated by the successful products they have had a hand in developing. Because of this, it would seem more profitable for an individual to invest their votes and influence on product ideas that are thought to be more likely to survive the development process, regardless of genuine preference. In this sense the previously approved products can act as misguiding precedents, swaying votes based on criteria other than personal sentiment. *Quirky* has attempted to improve this problem, and since April 2014 voting as a source of financial

[233] Ruth Simon, 2014.

reward has been replaced by a thumbs up or down system that does not result in re-imbursement.[234]

It is likely that similar problems have been faced by *Threadless*. Primarily this company also produces for stock in anticipation of demand, and evidence of the company's attempts to augment their voting system can be observed over the course of the development of their website. Using the *Wayback Machines*' web archives it can be seen that as early as 2005 the *Threadless* website began featuring an 'I'd buy it' button,[235] in addition to the original 1 to 5 preference score. The motive behind these changes will be similar to that of *Quirky*. Members may occasionally vote for striking or interesting designs, but ones that may not actually represent what they themselves would like to be seen wearing. The 'I'd buy it' button, however, also appears to have had downfalls. On various sites, including *Threadless's* open discussion forum, members would debate the meaning of the 'I'd buy it' button[236] and the importance it holds in determining whether or not a design makes it into production.[237] This could only be speculative as the number of times an 'I'd buy it' button had been pressed was not publicly visible,[238] while preference votes were. Ostensibly it is the preference votes that determine the designs that get produced, but *Threadless* staff

[234] *Ibid*.
[235] 'I Like the French', *Threadless*, March 2005, <http://threadless.com/submission/34276/I_Like_The_French> Internet Archive <http://web.archive.org/web/20050303222347/http://threadless.com/submission/34276/I_Like_The_French> [accessed 19 April 2015].
[236] 'Important New Scoring Functionality', *Threadless*, April 2005, <https://www.threadless.com/infoblog/1236/important_new_scoring_functionality?page=6> [accessed 16 April 2015]
[237] 'The Derby', *Shirtwoot*, September 2007, <http://shirt.woot.com/Forums/viewpost.aspx?postid=1543843&pageindex=28&replycount=2156> [accessed 11 April 2015].
[238] Joe Wasserman, 'Threadless Numbers: A Quantitative Exploration of the Nature of an Online Community', *Joe Wasserman*, August 2010, <http://www.joewasserman.com/all-entries/threadless-numbers-a-quantitative-exploration-of-the-nature-of-an-online-community> [accessed 12 April 2015].

also exert freedom to pick from the highest scoring designs. To be on the safe side members would encourage friends to vote on their submissions while additionally clicking the 'I'd buy it' button, whether or not they actually had genuine interest in purchasing[239] (this also highlights the general act of social favouritism as a source of vote distortion).

Later, in 2011, the 'I'd but it' button changed to a 'Notify me if…' button,[240] supposedly referring to whether or not a specific design makes it into production. It has since been further updated to a definitive 'Buy it' button that actually requires the voter to provide payment details and commit to buying the item if it is eventually produced. The results of this vote are now publicly displayed, but are seemingly separated from the overall preference vote competition. Instead, the website states that any design that receives a minimum of fifty 'Buy it' commitments will be produced to those orders but not held in inventory.[241] Crucially the company have not stated that the 'Buy it' button is not still factored into the decision making process when selecting from the designs with the highest preference votes.

Commentators have in fact speculated about the conflict that comes from attempting to better gauge the marketability of a *Threadless* T-shirt without also dampening community

[239] Joe Infurnari, 'Get Your Vote On! Threadless Submission!', *The Process*, January 2008, <http://theprocesscomic.com/blog/tag/t-shirt/> [accessed 11 April 2015].
[240] 'City Lights', *Threadless*, October 2011, <http://web.archive.org/web/20111030142913/http://www.threadless.com/submission/378895/City_lights> [accessed 19 April 2015].
[241] 'Design Funding', *Threadless,* <http://support.threadless.com/link/portal/15110/15140/ArticleFolder/152/Design-Funding> [accessed 27 April 2015].

spirit with salient commercial expectations[242] (thereby hindering the all-important rate of participation). But more importantly these examples demonstrate how mass-participatory platforms can be augmented (in a more elaborate way than the feature disability of *Stickyworld*) in order to better serve commercial or centralised interests.

Quirky is now even developing a weighted participation system based on an individual's likelihood to contribute in a way that is conducive to commercial viability. 'Credibility scores' will measure 'which online contributors are best at predicting successful products, by category' as well as 'how valuable each community member is based on his or her purchases, inventions and contributions to product design.'[243] This would be analogous, in the politically charged context of urban development, to variably disenfranchising the opposing public while disproportionally empowering the supporting public. Effectively, the commercial imperative that has formed the central premise of this thesis (while flirting with the possibility for truly open mass-participation) appears susceptible to a degree of corruption in favour of fundamentally centralised intentions, even if resultant designs have emerged through a relatively anti-authorial, decentralised design process. Lorenzo has mentioned 'there are no best practices for what we have done […] We're inventing, too.'[244]

Yet as with *Threadless's* problems balancing community spirit with commercial exploitation, there do appear to be upper bounds to how far a mass-participation community can be

[242] James O'keefe, 'Threadless and the Uncertain Future of Crowdsourcing in Apparel/Fashion*', Harvard Business School Blog,* March 2014, <http://blog.hbs.edu/dighbs/threadless-and-the-uncertain-future-of-crowdsourcing-in-apparelfashion/> [accessed 2 March 2015].
[243] Ruth Simon, 2014.
[244] Doreen Lorenzo, interviewed by Ruth Simon, 'One Week, 3,000 Product Ideas,' *Wall Street Journal*, July 2014, <http://www.wsj.com/articles/one-week-3-000-product-ideas-1404332942> [accessed 27 January 2015].

effectively utilised, sustainably, for centralised gain (similar to the centralisation of authorship discussed in the previous section). In this context it is understandable that architectural clients, as investors, would have hesitations about the facilitation of mass-participatory design, as it inspires activism while exposing a politically stacked system. The interests of commercial developers lie with obtaining planning permission, and to this extent the interests of the wider public are at least considered. But as highlighted in the introductory paragraphs of this thesis (referring to the work of Jeremy Till, Doina Petrescu and Peter Blundell Jones) public participation in the planning process all too often acts as a tick-box exercise or a token gesture.[245] De Carlo's 'quality of consensus' instead emphasises the need for planning *with* as opposed to planning *for* people.[246] Effectively consensus over a 'take it or leave it proposition'[247] is not the same as a preferable process of participatory problem solving in an attempt to achieve a greater 'quality of consensus'. In fact this is the argument of the director of *BetaVille*, a mass-participatory architectural design platform that will be discussed in the final section of this chapter ('Architectural Complexity'), focusing on the potential design agency of architecture's public.

Architectural Complexity
3.3

Conflicts of interest in mass-participatory practice have so far been explored, focusing on the agency of the professional designer and of the client/company. An idea of opposing public and supporting public interests have been introduced. Yet the reality of much urban

[245] *Ibid*, p. xii.
[246] Giancarlo De Carlo, p. 13.
[247] Carl Skelton (Skype interview, 27 January, 2014).

development is that a simple dichotomy expands into many different sub-groups of public interest. In the case of the Hawley Wharf development multiple clearly distinguishable agencies have been involved; including residents associations, traders associations, organisations such as the *Regent's Canal Conservation Area Committee*, and ward councilors, amongst other actors and potentially unclassified members of the general public – all bearing variable values and expectations. With such diverse, oppositional, complex and even unorganised interests, works of architecture can be far more complex than consumer products – perhaps technically and economically, but certainly socially and politically.

Effectively *Quirky's* design approach (where images and relatively simple sketches can be iteratively uploaded and voted on) has so far been sufficient to convey product concepts while the gist of many ideas can be reasonably well articulated by the open community. However this is less likely to be the case with necessarily larger scale, multi-faceted, environmentally dependent, dynamic and complex works of architecture. Just as only 60% of *Threadless's* community felt incapable of submitting coherent and polished graphic designs, it is reasonable to expect that the same variable hesitations would be true of an open architectural design discussion, even with the facilities provided by *Quirky* and *Stickyworld* (regardless of fully enabled functionality). Useful and promising ideas and improvements could easily be miscommunicated and ignored due to unpracticed or unskilled means of visual or articulated representation.

For a mass-participatory architectural design discussion to become sufficiently rigorous and fully effective, the reactive ideas of diverse agencies would need a standardised, easier and

more convenient means of incremental representation and integration – to be continually and sufficiently *communicated and acquired*. *BetaVille* is a mass-participatory architectural design platform that has been developed to solve this challenge. 'A distinguishing feature'[248] of this platform is that it allows and encourages members of the public to upload, tinker with, and create alternative versions of architectural designs, comparable to the simple browse and build-on facility of services such as *NikeiD*. Directed by Carl Skelton, *BetaVille* allows design ideas to be uploaded either as architectural models (using a program as simple as *SketchUp*) or as comments and votes. After uploading a design other participants can openly make changes, or leave comments and ideas in order to influence development. Multiple proposals can be viewed in context and tweaked into many alternative versions that can be browsed, adapted and integrated into other submissions.[249] A diagram of *BetaVille's* distributed agency at the various stages of design is provided in Figure 14.

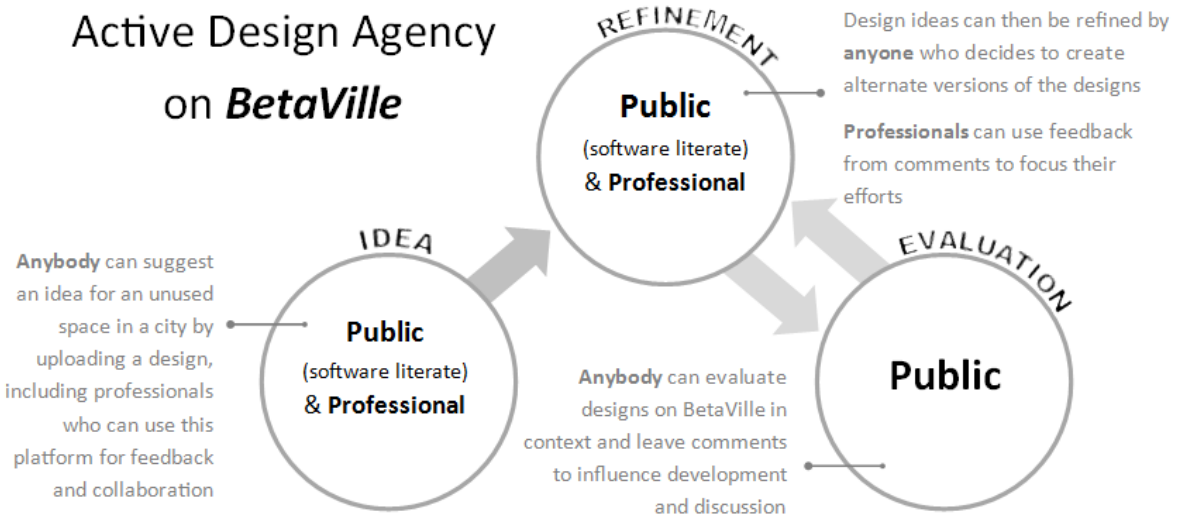

Figure 14, Active design agency on BetaVille

[248] *Ibid*.
[249] *Ibid*.

Unlike *Stickyworld* there is little possibility for disabling active design participation facilities, as this is at the very core of *Betaville*'s proposition. Yet this may be why *Stickyworld* has been capable of securing significant projects such as the London *Design Museum*, and why *BetaVille* appears to have received little traction. So far *BetaVille* has been trialed within academic contexts and through demonstration deployments, but in an early 2014 interview (see Appendix 5) Skelton mentioned 'we are now in the middle of the first what I think of as in-the-wild deployment, which is in the city of Los Angeles.'[250] The project is the redesign of a public recreation center. Skelton explains:

> At the point where people […] can move stuff around and discuss things […] then you have people collaborating on a problem solving thing, rather than arguing about a take it or leave it proposition; and that is a fundamental difference.[251]

Effectively *BetaVille* has been developed to work through the problem of finding the best architectural configuration to suite varieties of needs, using Hayek's actively inclusive, Lindblom's incrementally progressive, and therefore Banham's 'framework for decisions' approach.

Nevertheless there is still doubt as to the extent that participatory approaches can actually 'build consensus between competing or incompatible interests.' As indicated by Till and further echoed by Tim Richardson and Steven Connelly in their article, 'Reinventing Public Participation: Planning in the Age of Consensus',[252] consensual community architecture can

[250] *Ibid*.
[251] *Ibid*.
[252] Tim Richardson, Steven Connelly, 'Reinventing public participation: planning in the age of consensus', in Peter Blundell Jones, Doina Petrescu and Jeremy Till (eds), *Architecture and Participation*, (London: Spon Press, 2005), p. 90.

result in the 'lowest common denominator of style and technique.'[253] Recognising the potential impossibility of a good quality of consensus, Richardson and Connelly go on to argue 'if planning is to be inclusive and just […] it needs to engage critically with participation as a means of working with differences of interest.' It should 'pursue overall aims of social and spatial justice in a milieu of conflict, rather than expect to find consensus every time.'[254] The authors turn to an idea of 'pragmatic consensus', recognising the power struggles between all of the different agencies in design. This pragmatism is described as complete consensus between a limited numbers of stakeholders, while resigned to the less than consensual objections of 'difficult' participants. It was acknowledged that therefore 'a great deal of power is wielded by the designers and initiators of a consensus-building process.' [255] But herein lies the benefit of *BetaVille*'s approach, not only as a problem solving tool but as a fundamentally open and transparent platform. *BetaVille* allows many different alternatives to be evaluated in context, developed in parallel, fully represented, argued and critically considered throughout an all-inclusive problem solving process. The entire design process may therefore be subject to public review, given legitimacy by the fact that the planning system is publically accountable.

Nevertheless, limitations still hold *BetaVille* back. 'Tinkering' with a city requires that an accurate base model of the area has first been developed; and 'mirror worlds' currently only exist for select cities, such as New York and Los Angeles. Additionally submitting design input on *BetaVille* requires skill with *Google's* free and relatively simple modelling software,

[253] Till, 'Architecture of the Impure Community', p. 73.
[254] *Ibid*, p. 90.
[255] Richardson, Connelly, pp. 104-105.

SketchUp.[256] This circumstance differs slightly from *Threadless's* barrier to submission, where T-shirt designs should be fully composed by an artistically inclined individual (discussed in Chapter One). *BetaVille* allows relatively modest, individually simple, incremental changes to be suggested and integrated into pre-existing designs (as with *NikeiD*), rather than requiring fully formed and represented ideas to be submitted by each individual.

Also a crucial point is that *BetaVille* invites design input from anyone, 'anywhere in the world'[257] who might have a transferable idea or a skill to lend. As has been recorded in the case of *Threadless*, although 60% of the community members had never submitted a design, on average these individuals cast more votes and are more likely to post and respond to comments. With the majority of the community taking up the roles of reviewers, raters, and commenters, it has been a common occurrence for design submitters to actively requested feedback in *Threadless's* forum, and to take on board community sentiment before submission.[258] In a similar way community sentiment on *BetaVille*, in the form of comments and votes, would be likely to influence competing design submitters and editors. Essentially, more colour may not end up being just what the London *Design Museum* needs, but this cannot be known until such avenues have been represented *productively* and evaluated through a *predictive* decentralised process. Centralised design teams on the other hand represent not just an interpretive bottleneck for Hayek's 'knowledge in society', but also a productivity bottleneck. This is significant as Lindblom's 'science of muddling through'

[256] Skelton (Skype interview, 27 January, 2014).
[257] *BetaVille*, <http://betaville.net/> [accessed 14 March 2015].
[258] Fletcher, p. 132.

necessitates a high level of effort in many different directions, much of which in hindsight could be considered redundant. It would be impossibly unreasonable to expect a contracted design practice to keep up with this complex, shifting and reactive public opinion. But a global, collaborative, and participatory community (which might consist of students, novices, hobbyists, or even passionate experts) might conceivably be up to this challenge; driven by fun, social recognition (as in Howe's reputation economy), and potentially fair financial reward.

Additionally Skelton describes the general 'skilling up' of the public through systems such as online games and trip planning applications (in terms of moving around in virtual, three dimensional space). He also explains how the distributed capacity to facilitate *BetaVille*'s, in-context participation has only become technically feasible within the last five years or so, 'just in terms of what you could reasonably expect a personal computer to be able to keep up with.'[259] In this respect, *Betaville* represents an early prototype of the 'frameworks for decision' proposed by the Non-planners almost half a century ago. Progressive technology and public expectation will likely see the emergence and continual development of similar platforms (at the very least as offshoots from the gaming industry) making the design process easier and more convenient.[260]

Consensus may not always be possible amongst heterogeneous public interests, but it is only through the rapid productivity of active mass-participation that all potentially fruitful

[259] Skelton (Skype interview, 27 January, 2014).
[260] I argued this in my article (written during my ResM programme of study) 'Social Media and the Minimum Viable Brand-scape', in Design Intelligence, May 2014, p. 35. (See Publications).

avenues could be properly explored and represented. This would at least result in a variety of choice, lending greater bargaining power to members of the public against centralised forces that might otherwise have pushed 'a take it or leave it proposition.'

The limits of this mass-participatory approach lie in the shortfalls of current design software, in easily and conveniently conveying the ideas of unpracticed members of the public. In this sense the authorial architect, the controlling client, and the not-so-software-practiced public, all form interlinked professional, political, and social resistances to mass-participatory architectural practice. Most crucially, the commercial imperative that has influenced a centuries long trend of consumer-focused design (shared by the design disciplines of retail architecture and consumer products), appears to be undermined in the politically charged context of commercial architecture; as the race towards greater consumer satisfaction translates into a risk of relinquishing centralised control.

This highlights the dual nature of Non-plan's assumptions about commercial design. While commercial decisions often result from a natural responsiveness to consumer culture, these interests are often complex and conflicting in the field of urban development, and cannot always be met through a free-market, unregulated approach. Even objective 'frameworks for decision' have the capacity to be misused in the absence of impartial regulation, as has been demonstrated by the activities of leading innovators in the consumer goods industry. These political implications and power struggles have formed the basis of this final chapter, along with the competition of choice and public bargaining power that could be provided by a sufficiently regulated and enforced mass-participatory architectural design platform.

The following conclusion to this thesis will draw on these findings, emphasising the potential subservience of the architect to the demands of the client and the client's financial interests, set against those of a heterogeneous public.

C O N C L U S I O N

4.0

The motivation behind this investigation was to evaluate how the commercial imperative towards open, mass-participatory design in the consumer goods industry could begin to effect democratic change in the field of commercial architecture. Consensual participatory planning has long been an aspiration for the urban environment, lack of which remains a topic of significant criticism with token gestures of participation seen to impersonate meaningful intent.[261] This study has uncovered significant principles that are of relevance to this subject, as potential benefits, barriers and facilitators of mass-participatory architectural practice. The influence these findings could have on the commercial activities of urban development and the centralised distributions of architectural agency will be assessed in this conclusion, while evaluating Non-plan's free-market approach to urban development. These principles will then be summarised in their relationships to each other, and their implications for the future of mass-participatory architectural design.

Findings and Implications

4.1

Non-plan has acted as a vital body of critical argument with which to approach this topic, touching both the social and commercial aspects of consumer-responsive design. As discussed in Chapter Three, mass-participatory design platforms in the consumer goods industry constitute successful examples of Non-plan theory, as a commercial imperative, as much as they serve to highlight the complex social and political contexts of architecture and urban planning in which Non-plan was conceived. This complexity arises from discord

[261] Blundell Jones, Petrescu, Till, pp. xii – xiii.

between multiple agencies: the architects who are driven to maintain professional authorship and recognition over the outcomes of design, the interests of the clients of commercial architecture (not necessarily indicative of broader public opinion), and the heterogonous interests that exist between members of the public.

As Jeremy Till has explained (discussed in Chapter Two), the myth of the authoritarian 'fait accompli' architect most often belies what are actually the underlying intentions of the client, 'a myth which the profession does little to shrug off because it seemingly sustains its authority.'[262] In this sense the architect's resistance to authorial distribution is enforced only to the extent of the resistance of the controlling client, who is driven in commercial contexts to insulate financial returns on investment from the heterogonous interests of the public (as discussed in Chapter Three). Not to bend to this would be 'commercial suicide'[263] on the part of the architect, and therefore commercial imperatives as they pertain to public participation manifest in a distinctly different manner in the field of architectural design than in the consumer goods industry. This incongruity has not always been the case, as demonstrated by the centuries-long consumer-focused design trend mapped in Chapter One. But as the recent approach to fulfilling consumer desires amounts to a prominent decentralisation of agency and control (more so than the transition from intuitive judgement to objective research) the political disparity between the design disciplines of consumer goods and commercial architecture is exposed.

[262] Till, 'Architecture of the Impure Community', p. 70.
[263] *Ibid*.

This leads to an important inference about the role that architects often play as a design mediator for varied interests in commercial contexts. Till, in his article 'Architecture of the Impure Community', explains that architects are in a position to empower architectural consumers, by listening to and advocating certain needs. He explains that without this experienced advocacy, end-users are likely to find themselves disempowered and unable to affect positive architectural change, as centralised forces 'reassert themselves unchallenged.'[264] In Chapter One, this was likened to *Quirky*'s minimum viable design approach, lending necessary expertise to facilitate mass-participatory consumer products. Yet against the backdrop of potential mass-participation architecture, it can be seen that an architect may just as well act to empower or safeguard the interests of a client *against* the unsuppressed, unselected, or unexploited demands and desires of a heterogeneous architectural audience. Essentially, an employed architect, bound by a commercial service and contractual relationship, secures the centralised intentions of the client and promises return on their investment. This is the basis of an architect's value proposition in commercial contexts such as retail. Yet this would be opposed to an open and transparent, mass-participatory response that might theoretically propose a configuration that better meets the full spectrum of public wants and needs.

Effectively, despite powerfully predictive and problem-solving potential that might better please the majority of inhabitants of public space (to whom all urban development is accountable), the setup of the current architectural market is such that the interests and

[264] *Ibid*, p. 66.

biases of centralised developers are better positioned to influence architectural change than those of the general public. Natural market forces are sufficient in consumer goods to ensure consumer-responsive design, as recognised by the Non-planners, but only to the extent of a commercial supply and demand relationship. This essentially is where Non-plan's free-market, neoliberal approach to urban development fails, as emphasised in Chapter Three – at least without an incentive or mechanism in place to emulate a commercial relationship in service of the remainder (perhapse majority) of society, and not just a developer's commercial target market. Developers must receive planning permission that takes wider public interests into account; but it has been argued that this process is an ineffective token gesture, and indicative of rule-of-thumb regulation rather than the effective self-organisation of a free-market. The planning system for commercial urban development, at least in the UK, appears to be driven too often by placation (reducing significant public disapproval) rather than to maximise public enjoyment. Instead a commercial developer naturally seeks to maximise their return on investment while successfully making their way through tick-box regulations for *participation* or consultation.

Essentially, just as Hayek's price system strikes a balance between the opposed price preferences of buyer and supplier (encouraging value for money to the consumer as far as the company can remain profitable), the Non-planner's free-market approach requires a regulatory condition that can allow a balance to be struck effectively between the offset interests of the commercial developer and the non-commercially consuming public (encouraging quality of consensus as far a developer can still achieve a return on investment). The fundamental problem, as far as Hayek's self-organising mechanisms are

concerned, is that the basis of the price system does not regularly exist in the urban planning market: sufficient competition – amongst many different developers all competing to win wider public approval and therefore the prize of permission to build. Just as sufficient supplier competition in other markets ensures that the public are not price-gouged, sufficient and sustained developer competition in an urban planning market would ensure that the public are not gouged on what could have been a better quality of consensus (derived from a greater degree of design participation).

Sufficiently and sustainably stimulated competition may appear to be an unrealistic goal, but as discussed in Chapter One, this is exactly what leading consumer goods companies have achieved simply by putting mass-participatory design platforms to use: the rapid productivity of *NikeiD*, where '1 million designs' had been generated by consumers 'about 2 weeks before the broader launch of the Free Run+ 3',[265] facilitating consumer choice and competing design aesthetics on a massive scale; *Threadless's* open (but not so participatory) competition, where many competing designers seek community input in open discussion forums, as community members hold the power to cast votes in a highly competitive context, determining whether or not a design makes it into production. As discussed in Chapter Three, *Betaville* similarly has the potential to store alterations (and alterations of those alterations) of many different design proposals that can be openly augmented, voted and commented on, acting as transparently competing projects that are designed by and on behalf of all who could affect its likelihood of production. The final design configuration

[265] Shi, 2013.

would still need to provide a purposeful investment on the part of an interested developer. But this is where the oppositional members of the public could gain not just design agency, but bargaining power from the many alternative proposals within systems like *BetaVille* (instead of sending a developer back to the drawing board or leaving a frustrated citizenry with little choice but to accept a 'take it or leave it' proposition – as discussed in Chapter Three).

Collaborative and cumulative competition therefore acts as a central, all-important principle of mass-participation architecture. This is distinct from the exclusive, non-collaborative element of competition discussed in Chapter Two (belonging to *ArchBazar* and other architectural design platforms). The variety of consumer choice generated by platforms like *NikeID* and *Quirky* could only be facilitated practically by the principles of rapid productivity, market prediction, and viral promotion. Promotion increases the scale of participation, which in turn provides greater potential for market prediction. Most importantly, rapid productivity helps to explore and evaluate the many possible design directions that might be fruitful (guided by the element of market prediction), providing myriad competing alternatives, rather than far fewer 'take it or leave it' propositions.

Yet, principles that represented distinct challenges to effective productivity, prediction and promotion have already been discussed: the preservation of architectural authorship and the client's drive to maximise return on investment. Additionally there is the public's inexperience with architectural design software. However, each of these potential barriers can also be paired with an extra principle of mass-participation architecture, which may be

capable of overcoming each challenge. These additional principles are minimum viable design agency, the impartial regulation of mass-participatory architectural design platforms, and further software development to improve usability. Figure 15 illustrates the interdependencies between these principles.

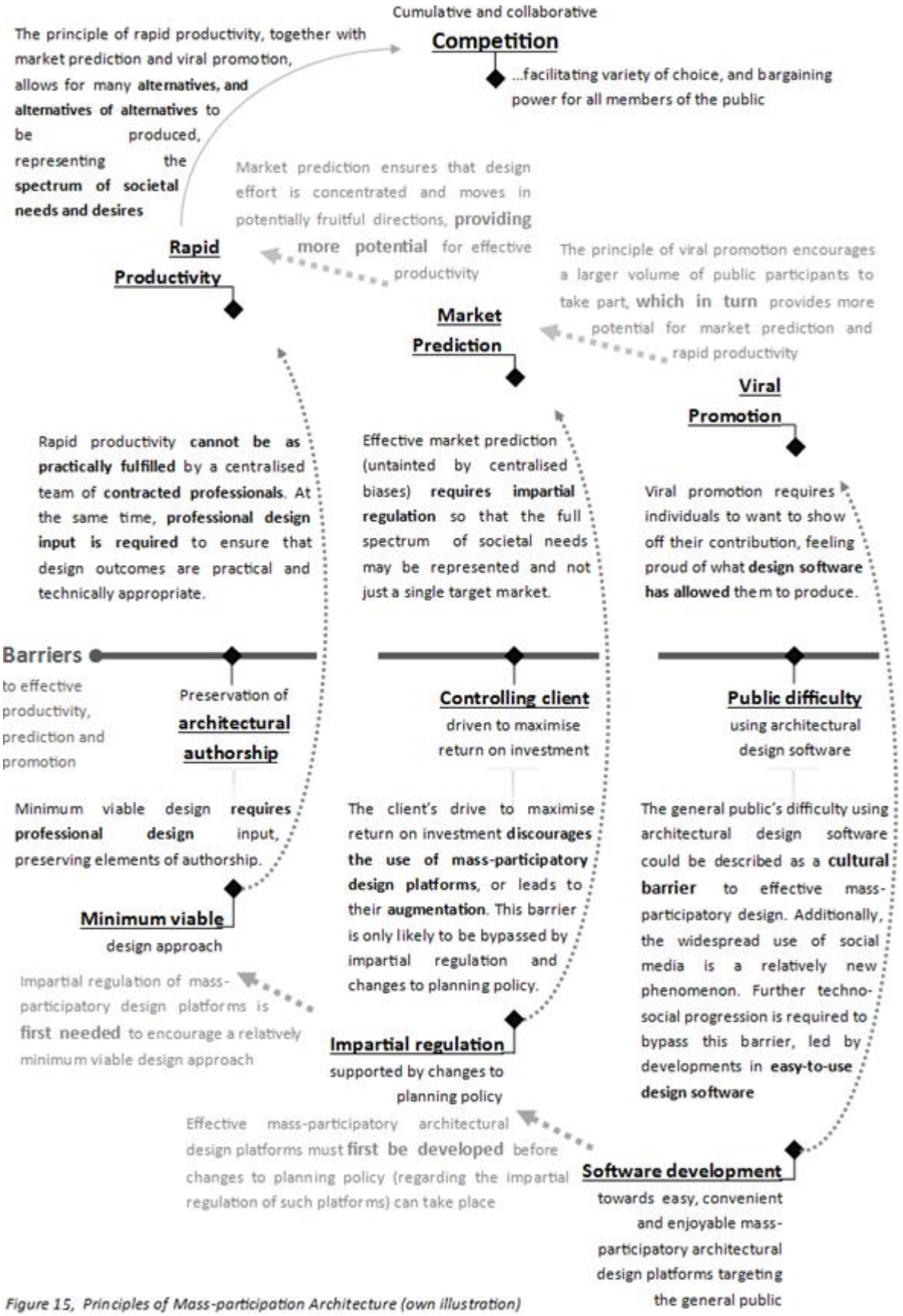

Figure 15, Principles of Mass-participation Architecture (own illustration)

Without the minimum viable design and manufacturing insight provided by professionals at *Quirky* and *NikeID*, these platforms would not be able to support the open community's mass-participatory design input in any commercially viable way (as discussed in Chapter One). The principle of minimum viable design agency is therefore likely to be an essential element to any implementation of mass-participation architecture. However, given this necessity, there may also be a means of reconciling mass-participation architecture with the preservation of architectural authorship. Just as all of *Quirky's* products are branded with the company's logo, having made 'invention accessible', so too it is reasonable to expect that architects might be forgiven for attaching an element of recognition to the outcomes of mass-participatory design, in light of their essential contribution amongst many other participants.

As described by Skelton, this 'does imply a fairly radical bit of willingness to think about the designer's role in new ways',[266] and as discussed, centralised authorship is enforced by the agency of client. Therefore pressure to develop and implement such systems is unlikely to follow solely from commercial incentives (unlike the consumer goods industry). In any event, these systems would also need to be impartially regulated to prevent the emerging circumstances seen at *Quirky*, *Threadless* and *Stickyworld*, where platforms have begun to augment in reflection of centralised interests, described in Chapter Three. Developments in planning policy will first need to take place to encourage the appropriate use of mass-participatory architectural design platforms. Yet (as indicated in Figure 16),

[266] Skelton (Skype interview, 27 January, 2014).

changes to policy and legislation are unlikely to come without sufficiently aligned public pressure. This swings back to the general public's aversion to complex software, as both a cultural and technological limitation, and a techno-social development that must further take place before mass-participation architecture could conceivably present a viable alternative to centralised modes of practice.

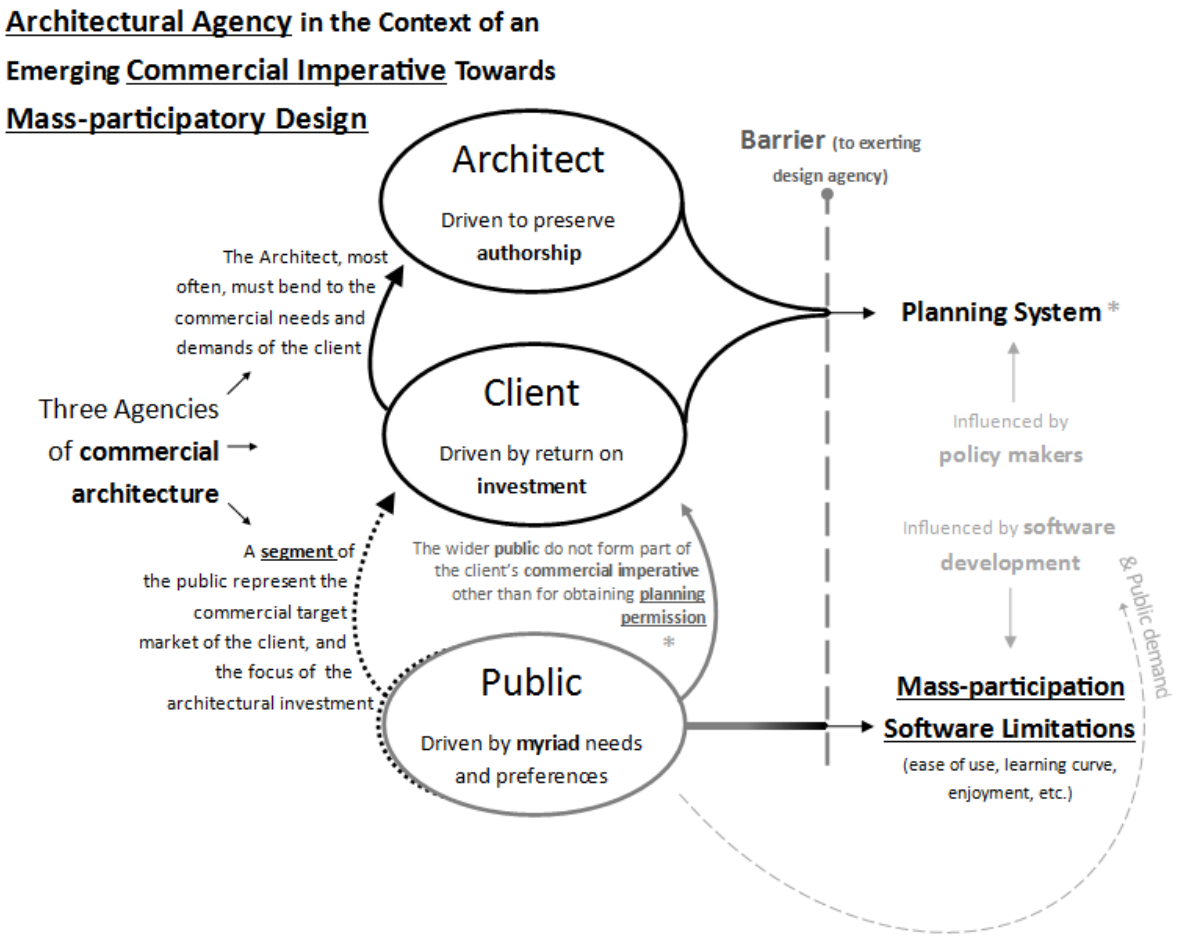

Figure 16, Architectural agency in the context of an emerging commercial imperative towards mass-participatory design (own illustration)

Nevertheless, while mass-participatory design platforms need further development to overcome the barriers of architectural authorship and public design skill, the political barrier

of controlling clients could be somewhat relieved in the context of interior retail design. In this case members of the public (other than an establishment's commercial consumers) need not necessarily be confronted with the design outcome. This offers an alternative to Sanders' explanation as to why there appears to be 'far less openness to having discussions about the exterior of buildings'[267] (discussed in Chapter Two). Just as the consumer goods industry deals with a heterogeneity of interest with a variety of product offerings, so too enclosed interiors are capable of allowing members of the public choice to avoid, or to enter and experience. Potentially, the practice of interior retail design could therefore act as a testbed for mass-participatory architectural design platforms. Further development and refinements in software could focus on fine-tuning the benefits of rapid productivity, market prediction and viral promotion in an architectural context, before tackling more politically charged circumstances where public opinion could be contrasted against the interests of the developer.

As Carl Skelton explained, 'we were sort of right there'[268] when this became technically feasible, just in terms of making mass-participation architecture practically possible. As Michael Kohn mentioned, it may just be 'a matter of time', but 'you need to go at the pace of the customer.'[269] It is therefore likely that further progression has yet to take place as the consumer-focused design trend mapped in Chapter One continues to run its course. This trend has so far been supported by developments in planning policy, from Skeffington's 1968 act along with other legislation (pressing for the inclusion of definitive design features

[267] Sanders, interviewed by Szita, p. 111.
[268] Skelton (Skype interview, 27 January, 2014).
[269] Kohn (Skype interview, 6 March, 2014).

with regards to large shopping environments since the mid-1990s,[270] many of which are related to research regarding public sentiment.)[271] Although the Non-planners confessed almost half a century ago that 'even to talk of a "general framework" is difficult',[272] these 'frameworks for decision' are now beginning to emerge, facilitated by continuous techno-social progression.

Requirements for further development can be drawn from the principles that have been identified in this thesis: principles to mitigate against (centralised architectural authorship, controlling clients, and public software difficulty); principles to encourage and enforce (minimum viable design agency, and impartial regulation); and those to establish and maximise (rapid productivity, market prediction, viral promotion, and collaborative competition). Such developments will be necessary if mass-participatory architectural design platforms are to fulfill the aspirations of the Non-planners, and empower members of the public to shape their own environments in a self-organising manner. Figure 17 organises these combined requirements into a diagram, depicting a potentially effective setup for a mass-participatory architectural design platform, based on the findings of this thesis.

[270] Coleman, p. 10.
[271] *Ibid*. pp. 4-5.
[272] *Ibid*.

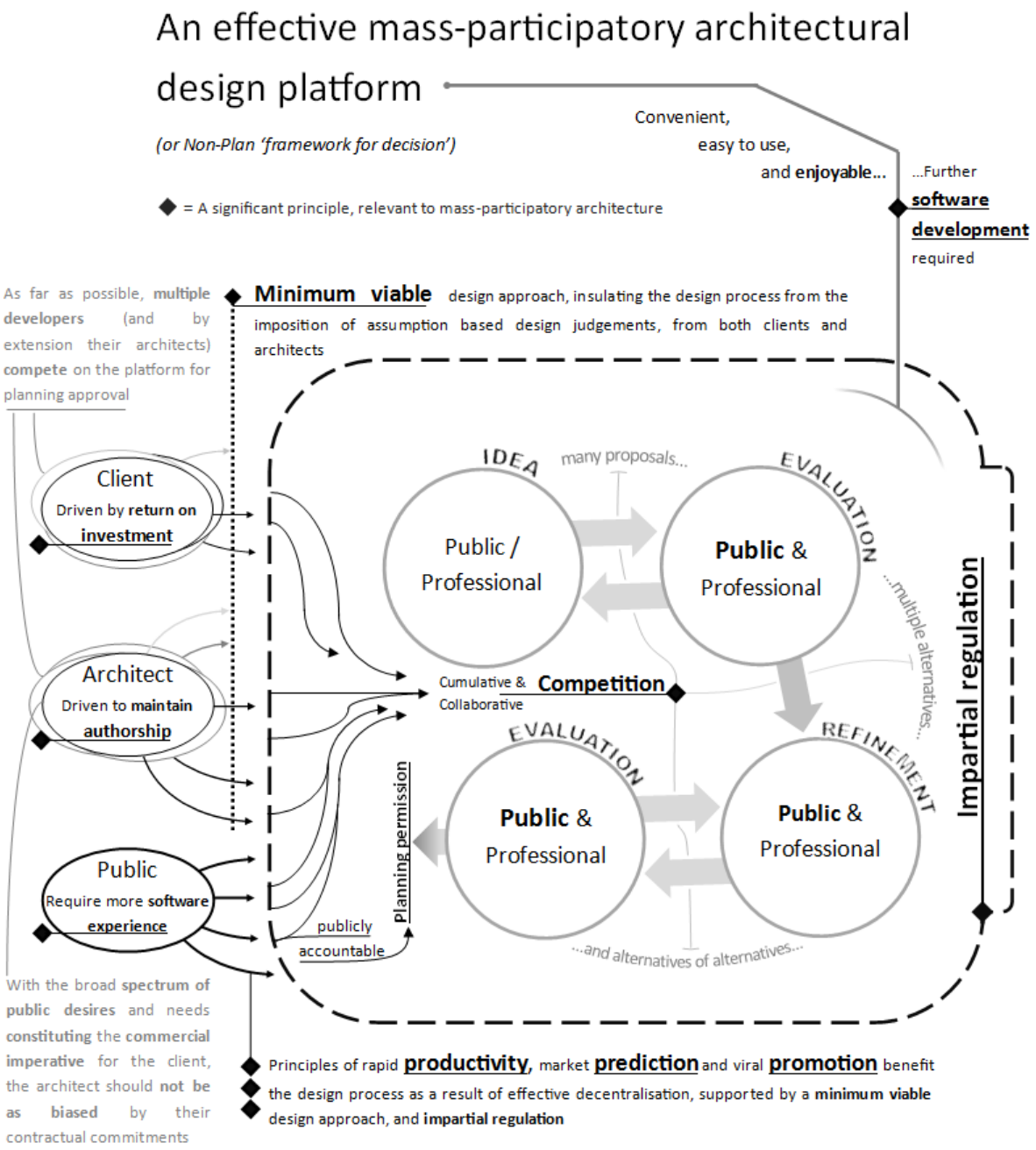

Figure 17, An effective mass-participatory architectural design platform (own illustration)

So far, this techno-social and political trajectory indicates that the field of commercial architecture in a matter of decades will feature comparable mass-participatory design platforms currently *revolutionising* the design of consumer products. At least in the latter industry this trend is set to continue, though commercial interests are clearly seeking to

bend mass-participatory production as tightly as possible to their will. It therefore appears that the design theorist and economist John Heskett was on the money with his razor-sharp 2005 statement;

> Exactly what will transpire is uncertain, but the signs are unmistakable – new technologies, new markets, new forms of business organisation are fundamentally altering our world, and, without doubt, new design ideas and practices will be required to meet new circumstances. The greatest degree of uncertainty, however, revolves around the question: whose interests will they serve?[273]

As with the *Skeffington Committee*, appointed in 1968 to find 'the best methods, including publicity, of securing the participation of the public',[274] it might be necessary in the near future for government policy to significantly intervene, and ensure that the design processes of urban planning and architecture are sufficiently open, transparent and decentralised to fully benefit the spectrum of societal needs. Planning policies should 'dare to trust the choices that would evolve if we let them'[275] (as suggested by the Non-planners), and encourage conditions and processes that could promote widely enjoyable urban development, and the least possible gouging of public interest. This would be comparable to the competition policies in many other markets that act to promote economic competitiveness, increasing the diversity of products and services offered – at lower prices but higher quality. Rather than representing an imposed, rule-of-thumb system for representing public approval (scorned by the Non-planners), the addition of collaboratively competitive, mass-participatory architectural design would allow for Non-plan's free-

[273] Heskett, p. 23.
[274] The Skeffington Committee, *People and Planning*, p. 1.
[275] Barker, Banham, Hall, Price, p. 437.

market, self-organisation to work in a favourable balance between quality of consensus and the preservation of commercial incentives.

Therefore, given appropriate regulatory conditions, and against this backdrop of rapidly developing culture and technologies encompassed by social media, it is conceivable that Non-plan's free-market theory will come to present an increasingly effective approach to urban development and architectural design. In this context, as further decentralisation takes place (supported by developments in design software and planning policy), architects could find themselves acting less as social interpreters, and increasingly as minimum viable mediators and coordinators of a significantly larger, more insightful, and profoundly productive collective; one that is composed of participants from the general public.

Future Research
4.2

Planning policy that supports mass-participatory architectural practice has been identified in this thesis as a pivotal principle about which the future of mass-participation architecture hinges. Yet, there may be inherent limits to the extent that planning policies could even be capable of regulating and encouraging such practices. Regulatory competition (as the competition between the policies of different jurisdictions) could conceivably obstruct political power to effectively enforce mass-participation architecture. This becomes an intensively economic subject, as international business and investment might move and flourish within jurisdictions that are more lenient in terms of businesses matters, while strict

regulatory jurisdictions loose out economically. The aspirations and intentions of Non-plan might therefore be criticised as economically optimistic. Research which evaluates the extent of this limitation, along with possible strategies for overcoming it, may therefore be essential for further progress.

Additionally, before planning policies could possibly be established to encourage the implementation and regulation of mass-participatory architectural design platforms, detailed surveys would be required to actually support the inference that mass-participatory practice can result in spaces that better suit the needs and desires of architecture's public. These studies would need to engage critically with the possibility that progressive refinement and development of mass-participatory design platforms will be required, before they could conceivably present an effective alternative to centralised modes of practice.

Software development towards easy-to-use design platforms is therefore a second principle upon which the future of mass-participation architecture hinges. Yet, it is unclear the extent to which further developments in social media and modelling software could be capable of narrowing the gap in active design agency between collective amateurs and the professionals of architectural design. Conceivably, continuous advances in intelligent algorithms, interface design, and tools for large-scale information sharing and collaboration could go some way to extending an individual's productive and creative capacity, at greater convenience and ease. This topic could be referred to as the mass-amateurisation of

architecture, and regarded as a vital area of research if mass-participatory design is to reach its full theoretical potential.

Further software development will also need to take into account the need to facilitate effective regulation and transparency in terms of the way that design processes and decisions are conducted and considered. This would be vital to prevent platform augmentation and preserve the principle of effective market prediction. Minimum viable design input from architectural professionals must also be accommodated by the mechanisms of mass-participatory architectural design platforms. This would help to ensure that public participants receive a level of support to guide their contributions, and that the final design outcomes are technically feasible.

While highlighting these potential trajectories for software development, this thesis has primarily sought to provide speculative insight regarding the future of the architectural design industry. It is therefore directed at practicing commercial architects and planners, as well as students of architectural design and planning; while it is also hoped to be informative for those engaged in architectural software development and research. This thesis has identified multiple principles relevant to the commercial activities of urban development and architectural design, arising from an investigation into mass-participatory practice in the consumer goods industry. These principles have been explored as potential benefits, barriers and facilitators of effective mass-participation architecture. They have been assessed in their relationships to each other, their potential influences on distributions of architectural agency, and their capacity to support Non-plan's free-market, self-

organisation approach to architectural design and urban development. The limitation of this research is that it has been based on inference, and deals with uncertainty. Follow-up research that revisits the conclusions of this thesis after a number of year will therefore be useful, supporting or challenging the idea of an increasingly decentralising design discipline, and examining early influences on architectural authorship, the control of architectural clients, and the active design agency of architecture's public.

A P P E N D I C E S

APPENDIX 1

Quirky's 'Open Discussion' Forum

Since the thread entitled 'Architecture by *Quirky* – challenging the community to design *Quirky's* physical stores' posted on *Quirky's* open discussion forum on the 2nd January 2014 (https://www.quirky.com/forums/topic/27915), the company have restructured the forum section of the website. *Quirky's* official community forum no longer appears to contain content from before this restructuring, and the original links to this content now redirect to the main forum page.

Unfortunately the original information is no longer available, and *Quirky* have been unable to assist in its retrieval.

APPENDIX 2

Michael Kohn, CEO of *Stickyworld*

Discussion held via email - excluding unnecessary information […]

15 January 2014

- […] I've been invited to write an article for Interiors & Sources magazine focusing on consumer participation in the design of commercial architecture. (By consumer I'm referring specifically to a company's customers as opposed to the architectural client/company itself, or their workforce. Therefore as opposed to corporate office blocks, I'm focusing more specifically on commercial establishments for retail or services.)

I was wondering if Stickyworld has been applied in any project that fits this description, one that is similar, or if there are plans for this kind of consumer 'co-creation' in the future? As opposed to public sector projects, I'm focusing specifically on private sector, commercial projects, where a company's intention is to profit from consumer interest […]

21 January 2014

[…] The answer is 'kind of' but not properly yet - we have done some early trade show projects which are about customer feedback, and also some projects for property sales for commercial offices.

The Design museum project is about engaging with 'customers' and shaping the future museum spaces through their feedback, and they will be doing more of this from April.

We are working on a number of proposals for retail and leisure - my gut feeling is that the future of physical retail is about getting closer to the customer and giving them opportunity to have a say in the experience they pay for.

This will likely rely on a mobile interaction, - we are currently funded to build our Stickyworld mobile app to engage young people in the design of the world around them.

So basically we are moving in this direction but your topic is more about future work than use cases we have already supported and proven […]

Discussion held via Skype, excluding irrelevant information […]

6 March 2014

- I've seen that Stickyworld began as an idea quite a few years ago, with a focus on facilitating end-user feedback in the architectural industry, and the platform has since diversified into a feedback and communication tool for a variety of different industries. I was wondering if you could outline the ways in which Stickyworld is currently being used.

Okay so, I remember some of your earlier questions were probing at the uptake in architecture. So I'm a practicing architect by background – and I think you're doing stuff in the space that I moved into after leaving main stream architecture – are you doing computational research?

- Currently I am in the middle of a Masters of Research in Architecture, so I'm still studying. […] I'm very interested in computational technology facilitating participation in architecture.

So I can talk to you about *Stickyworld* in this interview, but just so that I don't forget you should also touch base with my colleague from *Slider Studio*, Renee Puusepp. If you went to *sliderstudio.co.uk*, he's just updated the site. So that was my architectural practice that invented *Stickyworld*, and we started the idea back in 2009. Previously *Slider Studio* had been doing computational work, which it's now going to carry on with (Renee's work). But we also started moving into gaming engines for end-user participation, which I think is what you're currently writing about and interested in.

My own interest as an architect – I used to do competitions for concept houses. I was very interested in end-user/consumer choice. I used to work for *Cullinan's* and I left to go to University and learn about computer programming, and set up *Slider Studio*. We were doing computational research and then doing stuff which was about enabling consumer choice, which is my architectural interest. We did a competition for some research into sustainable communities, and developed a process for enabling self-build at volume scale. But our method of exploring it was through simulation. We built this engine which was called *YouCanPlan*. *YouCanPlan* was a big gaming engine written in *Java3D* and allowed architects to upload *SketchUp* models, and for residents then to go around those models on a bus, and change different options and see how they would look. In the self-build mode, that was about them designing their own homes and getting mortgages, etc.

We then did this project with the same gaming engine for *Birmingham City Council*, which was about public consultation. So what I'm describing really is our journey into – how did Stickyworld start? One of the residents actually was using the software and said "why can't I put a sticky note and do what I do in the real world?" So that was the point at which we saw sort of moved into more public participation, as opposed to pure software for architects. It's a long winded way of explaining that we started building software for architects, including our own interests, and that included CAD scripting. We then moved up the scale, employed software engineers and started in gaming engines. Then the feedback was – it needs to be the website, it needs to be much lighter than a 100MB download, not many people are going to do that; and it needs to really make it simple. Actually we've been learning it needs to be simple, and continuously simple.

So *Stickyworld* still, as a tool, presents 3D environments (or pseudo 3D environments) through panoramics; and the lessons are that the end-users want quicker, simpler ways all the time. That's what the Internet's done, it's actually made us very impatient. Whereas there are some people that want to spend a long time and use complicated technology (like BIM); or on *Stickyworld* there are

people that want to write lots of things. But equally there's a greater number of people who just want to click one button to give their feedback. So *Stickyworld* as a business is moving forward in applying *Stickyworld* in multiple industries, not just architectural design. […]

In terms of our root to market – I don't think we've got massive traction yet in architecture because we haven't tried hard enough, our technology wasn't ready, we haven't spent enough money in marketing. I think there's a lot of confusion as well. I've got lots of friends now in director positions in practices, and I've been around for long enough through *Slider Studio* to make some more progress, commercial progress, in the architectural space; and it hasn't happened, I think because we just haven't been good enough, our marketing message hasn't been clear enough, there's been confusion about "is Michael an architect, is it *Slider Studio*, is it *Stickyworld*?" It's taken us a hell of a long time to separate our interests, and that's only just happening. So I only ever work for *Stickyworld*, I don't work for *Slider Studio*.

- […] It does seem that, in the architectural industry, if you were to compare that to the product design industry, there does seem to be almost less of a willingness, sometimes, on the part of the architect to get involved…

You're absolutely right, I can hear you're picking your words carefully. But you're absolutely right that in terms of the training – so I used to teach at *UEL* and I taught professional studies in architecture at *UEL*, and I understood that the culture of our education (the education that I went through personally), the training or the thinking that user-centered design (what the user thinks and does is important) – If you look at it as a commercial model for architects, how many architectural practices are actually making any money doing that? The clients don't want to pay for their time to do that. They don't have the tools yet, or the knowhow of the tools yet to do that affordably. I think that's *Stickyworld's* opportunity, but I think that there is a cultural barrier, or there is a time lag.

Because I do believe, Alex, that architects will get it, and they will see commercial sense in it, and they'll see intellectual sense in it too; in the way that a product designer sees. How can you design a product without an end-user? You can't do it. It's nonsense to talk about design – in fact user-centered design is nonsense because all design has users, right? That's the point. But architects don't get that because the way that architecture also crosses arts, in everybody's mind, not just an architect's mind – there's something precious about doing, the Olympic swimming pool, say. If you did it purely from user-centered design, would you design buildings that way? Probably not. I'm not going to make judgements on it. I think there are types of architectural design practice, let's say workspace redesign; the practices doing that, they have to apply more user-centered approaches, they do do post occupancy research. It's just not glamorous.

So our customers, who pay us money – we've got local authorities paying us for community consultation, we've got transport planning teams doing focus groups about transport planning, we've got communities doing community led design, and neighborhood design and neighborhood planning, we've got facilities managers using it as staff engagement in the office space sharing ideas about how to save energy or "how does this flippin' thermostat actually work?" So it's like O&M user manuals online. We do have architects signing up for private design review, and that's the bit that does make sense (architects to architects) to them. We just haven't marketed in that space yet. So there's only four of us on the team, and we're focusing on traction where is going to make sense.

Now your original question was very interesting to me, because you were talking about retail.

- That's right. I was looking at a few of the projects that have been facilitated by Stickyworld, and noticed that it seems to be more in the public realm, with councils and cultural buildings like the Design Museum; public buildings. But I was interested because it seems to me that the idea of Stickyworld could be useful for commercial retail or service architecture; the primary motivation of the client being financial return on their investment, which obviously comes from customers entering into their establishment, enjoying their time, and paying for that experience.

Visitor experience – so hotels, classic hotel chains, airports, retail centers… The answer to your question is I see that, I'm glad you see it, I see it too. We've been really slow on executing on that, so that you actually meet those people, and to develop the product and the proposition, and have all of the testimonials to move into those fields. We will get there, I promise you. What's happening is I'm just focusing on customer traction and testimonials from – although they're public sector and local authorities they're still recognized – and creating an opportunity to get more into the commercial space.

But I think it's also, more about where did I come from as an architect. I used to work in *Cullinan's*. We had educational clients, we had public sector clients, and maybe my own personal exposure to that **[POOR CONNECTION]** therefore being a bit slow to exploit that. But *Stickyworld's* now doing bids with the likes of *CISCO*. So we've sort of stepped up the level to talk more about smart cities, smart citizens, and the last bid we put in was actually with CISCO for the highstreet. So that will move us into retail, and we'll probably, if you ask us in two years' time, will be able to answer with a whole load of examples.

I think the interesting thing though is that it comes down to – with *Stickyworld* you need content, and you need a question to engaged people in that discussion. Just like on *LinkedIn* groups. You need a good question and people engage. It's the same on *Stickyworld*, you need a good question, with great visual content (relevant content to that question), and people engaged. Not everyone can do that. We've learnt through various iterations of our platform that that's what's effective. So we can build the technology, but we've also got to go and, in certain markets, educate people to use the tool correctly. So you see that in marketing blogs, people teaching people about social media marketing and how to get people to listen. I think maybe it comes back to your original question about the difference between product designers and architects. I guess – do people who are creating content know how to ask questions about that content? Maybe you do need a third party, a PR, communications or engagement professional to use it, because they don't have such a vested interest in the content that's being discussed.

- […] I wasn't sure if I misheard when you were explaining the progression of where the idea of Stickyworld came from. With the YouCanPlan Software, did you mention that end-users were capable of making alterations?

Well in the very first configuration of *YouCanPlan*, yes they were. We ran a pattern book competition for architects to design house types with different parts that people could interchange, and then we built that onto the platform, and we ran that for this semi-assisted self-build. It was called self-enabled procurement. Now actually custom build is a big thing as a government method to produce housing. We were researching it back in 2007 and trying to build this software around that concept. So our platform can allow content creation, with constraints, from the end-user. […] I guess one of the constraints of *Stickyworld*, is the level to which you can engage and participate depends on the person organizing. So it's not a single community free-for-all and content creation like on Minecraft.

It is actually geared toward somebody who's trying to get insights. Asking questions, engaging a community to get those insights and using relevant content – and there's the key. That you need an organisation, and architect, a local authority, a brand to say "you know what? I think the community has something to input on this, and I'm gunna give them a really easy way to do it." So our whole gambit is that those people exist in the thousands. I think they do in many instances, but they don't specifically exist on each and every build and each and every project that's out there on the drawing board, yet. So our gamble is that society is changing, technologies are changing, and more and more people will look for solutions like *Stickyworld* to get those insights. But you need that controlling, editorial, organisational person that's going to set up the engagement and manage it.

- I definitely agree that there's going to be more and more demand for this kind of service in the future. You mentioned that Stickyworld is also being used within business as a kind of communication tool. I just wanted to double check; in these corporate circumstances I imagine the individuals involved are able to upload their own contributions in the form of visual content, as well as using sticky notes to discuss that content?

Yes, that can happen now. The person who's organizing *Stickyworld* is called a manager. The manager can set up a sticky room so that everyone else can upload content. But there needs to be a purpose for the sticky room. In the case of the Design Museum, their purpose is to engage and get questions. They could have set it up so that the visitors could also upload, let's say, their favorite design. They haven't set it up that way, but they could do. I think it's just a matter of time, and us listening more to their requirements and concerns, and prompting them and educating the customer, saying "look that would be a good idea, you could do it that way." We find, because we've got ideas and because we've created this creative technology, doesn't mean to say that it's going to be used. You need to go at the pace of the customer.

- […] Of course, you can create a service or a product, but ultimately it's going to be used in the way that…

…people want to use it. It's also then, partly – it comes back to business and the go-to-market strategy, and your resources to reach those markets and also an absolute focus on those markets. So whilst we know that we could go after the retail space, and we'd make a hell of a lots more money and grow our business faster doing that – is it completely addressable to us yet? Only when we've got a few more architects, commercial architects, working in that space. They would then introduce us to their developers, and they'd say "well we've got this content, we're happy for you to use it this way and ask your future retail audience, to get them excited about this new shopping center, and to feedback, and yes, we'll listen to the changes." There are lots of people (stakeholders) that we need to – its hearts and minds stuff. We've got to get them on side of *Stickyworld's* vision, to say "well, it's a good vision, but it's also not threatening to us. We don't have to change too much of how we're doing things. Because actually we were going to organise that big expensive public exhibition. Actually now we'll still have the exhibition, but we don't have to spend so much money on prints, we can use the online channel this way." It's that type of thing. It's very hard to bring innovative stuff to the market, without money. You need a lot of money to disrupt properly. You need culture to be at the right time.

The things we're doing at the moment – a big focus on mobile. We don't have our mobile app, and it's not going to scale properly in planning without that. So we're investing heavily this year. We've got a big project with the MoMA trust to engage young people in discussions on planning. The

mobile app then can – you know, you go to a retail meeting, they say "well, have you got a mobile app?" and we say "yes we do." So, little companies like us, we have to have a good strategy to jump from project to project and customer to customers to build out the whole vision.

- I was wondering if there may be a particular example of where Stickyworld has facilitated end-user feedback that has made a notable contribution to a project, or even perhaps changed the direction of a project, or obviously guided a project.

It's a good question, in terms of how do you measure the impact of an individual comment. I think a good idea is a good idea, and they come from different sources. So if you had multiple ways of getting good ideas, that's going to help any project. Actual examples on our platform? – The ones I cite, that I'm proud of, are little things. We have school children suggesting planting schemes up in Lincolnshire, and the councilors listening saying "yes, we'll put this idea into the local plan." It's not big impact, but its real people stuff. In terms of impact, you've got lots of people asking the *Design Museum* to include more colour in the scheme. The architect is John Pawson, so people are not liking what they're looking at. The question is, will they listen? Will that impact? I don't know, we'll see at the next stage. I bet you that it does. […]

So these are the questions, we ask these questions too. If we can get impact happening which is beneficial; which either has a social benefit or a bottom line benefit (that's even better from a commercial perspective) can you prove that talking with end-users, understanding your visitors, doing what commercial businesses will do with customers; if you can prove there's a net – you know, you've de-risked your planning application, you've de-risked your investment in a facility you think people want (do they really want it?) That's got to be the smart way. It's the whole idea of lean design. In the startup world you have to follow lean because you're making lots of guesses, and lean just means that you're using fast feedback cycles to build something, test it, learn something, move on, and do it again. Can architecture work that way? Can you do lean architecture? I would hope so. I worry that we've built the tool again so many years too early. It might mean that we do have to go and play in other territories. Although having said that we are investing heavily in the built environment. That's what I understand, and that's where we see the opportunity. Whereas other consultation platforms, engagement platforms, aren't really focusing on the built environment, Stickyworld is.

[…]

- Why do you personally feel feedback is such an important component in the process of decision-making in design?

As a designer myself, I worked an awful lot on intuition and gut confidence, and feedback wasn't actually a good thing in terms of how I learnt. I went through this process of 'crits'. A weird term, and not a super positive term. So feedback has had a bad grounding for many creative designers and particularly for architects I think. So we're not trained in how to use feedback, in how to treat it as gold dust. Feedback is coming from someone else's point of view and someone else's perspective; and if you just take a little bit of time to consider it, it can help you build quality into design, make designs more robust, and you can answer more questions about them because you've considered them from other people's points of view, and you can only do that with feedback. There is no other way for you to see the world in the way others see it unless you talk to them.

So, why do I think it's important – why is it important to every other designer? I think for them it's because the value in products comes from use. If it's a good product, it's really easy to use, it's solved my problem. Whereas I think with the criteria for measuring success in architecture, those type of questions are suppressed. I think those sort of success criteria, they don't feature highly. Success for me, previously as a practising architect, was would my *beautiful* photo, my *beautiful* building, appear in a professional journal with a nice narrative by another professional, describing that this is good. That still is the method, because the way that a developer will then pick the next architect is as much about peer review, which is measured through those types of journals, as opposed to "right I'm going to go to this building, I'm going to talk to the users of the building, I'm going to talk to the facility managers, I'm going to talk to the previous owner who sold it; was it easy to sell? What do I feel about it myself?" – Not going as a tourist but going as a potential end-user yourself. So I think there is a lot to move in the mind sets of architects, to really dig down and work out what feedback is all about. Why do I believe in it? For those reasons. It's the future of design.

- Do you think that feedback from certain stakeholders in a project can be more important that feedback from certain other stakeholders, in terms of creating a successful design?

The simple answer is yes, I do believe that is the case, and we have built our platform to enable that. For instance if you want to find out what investors think of your proposal you can set up private sticky rooms and justify to the investors, and have an investor led conversation about your proposal. If you want to invite end-users – you're designing a swimming pool and you want to talk about the relation between changing rooms and the pool edge, you really need to get good feedback. You need to invite swimmers, regular swimmers, to give you that feedback. If you also want to include an Olympic diving pool in there and get some understanding about that relationship, you need to ask the divers – and so architects are always managing stakeholder feedback. They're doing it every day through meetings and emails and conversations, and I don't see that changing. I just don't think it happens enough, and I think in large, stakeholder groups are excluded due to time and resources. Decision-makers on projects aren't always valuing feedback, and they just skip it out. That's why consultation is sometimes seen as a tick-box exercise. You have to do it on some level, legally.

The skill for the architect is to design a feedback, stakeholder management - there's an *architecture* in that to work out. **[POOR CONNECTION]** It is important to work out who you're talking to and what you're trying to get out of it.

Michael Kohn, CEO of *Stickyworld*

A P P E N D I X 3

Michael Sheridan, Chairman and Founder of *Sheridan&Co*

Discussion held via email

19 FEBRUARY 2014

- As an internationally successful design agency what steps does Sheridan&Co take to ensure their store designs are effective in facilitating quality customer experiences? If there were to be a magic ingredient, would this be the experience and talent of the design team, input from the client, participation/feedback from potential retail customers, or a certain combination?

The best results tend to come from gatherin input from every stakeholder involved in a project. Perhaps the magic ingredient that Sheridan&Co offer is the way that we interpret this information. Utilising and maximising these views and opinions allow us to create touch points that will ultimately result in outstanding brand architecture.

Early on in a project we take particular care to define what a great outcome would look like. Setting these goals early allows us to frame the correct questions for clients.

At Sheridan&Co we don't stop with the obvious. In central London we have a space for clients to display their products and branding called The Study. It is assets such as this that allow us to gather invaluable insights directly from the shopping community, creating that extra level of engagement.

- As an exemplar case, which specific design project might perhaps best illustrate Sheridan&Co's general approach to retail design (relating to the above question). If image(s) would be available for this particular project this would be very useful.

Over the years there have been many projects where we have essentially sculpted the final design around who we are selling to, rather than what is on sale.

The World of Whiskies store is a great example of this, where a theme of personal discovery was central to the project in order to build it around the consumer. An interactive 'discovery bar' brought an element of theatre to the sales process, helping to demystify the whisky distilling and drink-making process. Following the installation within Heathrow Airport, London, the redesign resulted in over 20 per cent uplift in sales.

Whilst this project strategy worked extremely well, there are clients that we have worked with over a sustained period of time that illustrate relationships that have started small and developed into something huge. We have worked with Clarins in Europe for 31 years and Laura Mercier as a global brand for 15 years.

The fact that we have been associated with so many brands, over 150 in 31 years, all at different stages of development, to my mind indicates that we truly understand each core proposition and have the ability to stretch and adjust our offering as customers grow.

- Sheridan&Co's 'The Study' is a very interesting concept. Has it been proven effective in helping guide the design team in finding effective solutions that drive sales? Am I correct in assuming the primary goal here is to gain feedback and data from potential consumers? A project that might best highlight the use of this design tool would also be very interesting.

We don't use the word 'innovation' lightly. To us a portal like The Study connects us directly to shoppers. As we understand it, we are the only retail agency to operate from a retail space and this puts us beyond a B2B offer more like a C2(B2B)2C because we engage with the general shopper on a public basis, collecting insights and measures that help us to contextualise our concepts and design solutions.

This week we launch 'shop-lift', a consumer initiative interactive product that delivers new levels of engagement and experience through tagged product. At the same time feeds back real time analytics to the brand, such as for how long and how often products are in the hands of customers. We are pioneering real space retail analytics and feel that this is the start of smart tools being available that will help make certain products more desirable to buy in real space than online.

Michael Sheridan, chairman and founder of Sheridan&Co.

A P P E N D I X 4

David Janner-Klausner, Director of Business Development, *Commonplace*

Discussion held via email, excluding unnecessary information […]

25 JANUARY 2014

- […] I've been invited to write an article for Interiors & Sources magazine focusing on consumer participation in the design of commercial architecture, such as retail or service establishments. As opposed to public sector projects, I'm focusing specifically on private sector, commercial projects, where a company's intention is to profit from targeted customer interest. I was wondering if Commonplace has been applied in any project that fits this description.

Are there any projects similar to this that have made use of Commonplace to gain commercial consumer feedback? If not are there any plans to promote this kind of participation in the future? [...]

27 JANUARY 2014

[…] As a fairly new start-up, we are very interested in developing effective ways for users and residents to be involved in shaping their surroundings - that is our raison d'être. Our app has so far been adopted for use by a number of sectors - housing, neighbourhood planning - although not yet commercial development. It is however definitely a sector we are interested in. Our proposition is simple - by knowing more about people's needs and expectations, developers can fine-tune plans, designs and mitigations to achieve significant efficiencies getting through the planning system and ensuring subsequent local satisfaction [...]

David Janner-Klausner, Director of Business Development, Commonplace

A P P E N D I X 5

Carl Skelton, Director of *BetaVille*

Discussion held via Skype, excluding unnecessary information […]

27 JANUARY 2014

- […] I suppose it's still quite early yet but have any BetaVille proposals yet come to fruition in the real world?

That, we have not transformed. So the things cooking now, because as of about three years ago I would say the application was **----- LOST CONNECTION -----** so we did a bunch of demonstration deployments, we did a bunch of controlled experiments within academic contexts, we are now in the middle of the first, what I think of as in the wild deployment. Which is in the city of Los Angeles, so I'll be flying out there on Monday, and it's an interesting case actually. It's the redesign of a local recreation center that's right smack in-between a couple of districts that have historically been a bit rough and some of which are gentrifying faster than others shall we say. So that's the first uncontrolled deployment just in terms of 'Okay, here's a *BetaVille* of this thing, go crazy community, let us know' […]

- […] In much of the literature that I've read about BetaVille there seems to be emphasis on the benefit for the public in having a voice in the architectural decisions that take place around them. But If you were to comment on the benefits to the investors, that would come from potential customer participation in for example retail or other commercial buildings - would there be benefits for the investors?

With the proviso that it does imply a fairly radical bit of willingness to think about the designer's role in new ways. One of the things it was actually designed to provide for, and it should be noted incidentally that in the process of engineering it to be a competent 3D modelling environment where you would have some confidence that things are the right size and shape and distance from each other, is it's actually a legitimate GIS application. You know it's a UTM projection. It conforms to all the GIS standards. You can actually start off a model simply by pushing a button that goes and gets the streets from open street maps as an overlay, so you can check things and so on. But one of the scenarios we thought about hard was to make sure that it would support either a municipal government or a private developer of something big enough to justify the effort to be able to essentially have a pre-design process run as a marketing initiative. So now imagine that prospective tenants or clients in other terms are actually in on making sense of how big things are and what goes where and how much of it they're prepared to commit to, and so you can have something much more concrete than a marketing study as a pre-design process.

- […] So essentially by having this predesigned model in BetaVille and getting feedback from the public, or from potential customers that may be visiting there as a retail place, your saying that it's another form of market research in effect, and you can tell how it's going to be received?

Well effectively you could build, conflate or synthesize market research and the predesign process, and that will do two or three things for you. One of which of course is that if nobody shows up for whatever the dramatic premise is, say for instance a space center in Bremen then you know better than to build it. Then on the other hand you can be in a situation like, say a condominium developer in Singapore where there's a radical disconnect which was there from the first *Unite d'habitation*, in the early 60's, between how extended families work and settle and **--- POOR CONNECTION ---**. And so it become practical to work with the people that are going to live there to configure the thing in ways that will make sense to them, as a long term engagement […]

- […] I was wondering if you had an opinion about why the current activities of public participation in architecture seem to be far more common in public sector proposal like local parks for example, and why there appears to be much less participatory activity in commercial buildings, such as retail establishments, restaurants or hotels.

On the one hand I would say that the discourse of participation is reasonably congruent with how we're used to thinking about, not so much the public sector even, but public space. To the extent that the public sector proposes to construct a compulsory environment (things that people have to pay for, have to be in all day every day, and so on and so forth) then in a way the legitimacy of town planning and public works rests on an order of publicness that everybody knows how to think about. The idea that for instance a small developer might aggregate a coherent group of a couple of dozen clients for a medium size project through design is actually on the other side of thinking about large buildings as communities, that can be constituted as communities, and they can then go through the process of making sense of what is the right physical environment for them and making that buildable. Now that as a technical proposition became feasible, just technically feasible, in about 2007 or 8. I mean we we're sort of right there when got so you could, just in terms of what you could reasonable expect a personal computer to be able to keep up with. What sort of development frameworks were available, and just the skilling up of the general population in getting around in three dimensional space. So it's very early days in terms of the capacity actually being there.

Now one of the things that I think will slow down the typical private sector developer is on the one hand the relationship between architects, engineers and money is already in a bit of a mess, where architects got constricted to digital design workflows in the late 1980's – early 1990's which means that an architect over 45 is not a native speaker of that stuff in the first place; which is to say that an architect old enough to be a principle in a firm that you would engage for a big project. And then it's bad enough having to deal with the client and the engineers, without having the process of the conventional design-build process cluttered up by the customers who will typically not show up until later. Now it's actually in England that the mature form of the architecture and engineering workflow that's now possible, has actually been well enough laid out that anybody would actually think about doing it. Because there's a bunch of stuff about parametric design driven by the physical performance of the buildings, and the materials and systems in them – look up John Frazer's Christmas lectures at the Architectural Association of 2010, and it's long and the light is terrible but that's probably the most efficient way to get an idea of where these kinds of things can and

ultimately will go. So for the record if there's an architect, engineer, developer (or public sector developer for that matter) proponent who's interested in actually designing through the desired physical performance and in the formal knowledge of the community that is going to be in there, whose competence to be at the design table can inform a higher, deeper more resilient more sustainable community environment situation for the medium to long term, I would be delighted to work with them. But we have just made that possible really in the last two years.

- Okay, and with the technologies that are arising to facilitate participation, such as Betaville, -

I want to clarify that, it's not just to facilitate participation. It's to make participation competent and effective as a design partner for a major investment.

- And so it makes participation easier?

Not easier, that's just it. Not easier, I mean because participation is fuss. This is the thing that needs to be acknowledged and respected. Because if it's being done with any integrity at all, which is at least 15 percent of the time, it's a big fat headache. What I'm talking about is making that big fat headache into a really good investment. That's the point we've gotten to. That's possible. Not that it's going to be easier, but that it's going to be worth it.

- […] How important do you think it is that the public are not just able to comment on architectural proposals through BetaVille, but they are also able to upload their own ideas in the form of virtual models?

It's a distinguishing feature at this point. Now there are two or three different things going on in there. One of which is that putting up a blog (what is functionally a blog) with basically bulletin boards for different topics, is at a technical level a dumb enough proposition that there is an entire species of small entrepreneurs to consult that is competent to mount and operate the things already. And so there are lots and lots of those. **--- POOR CONNECTION ---** So if the general population does not have the opportunity to put something in there, they have no idea how hard it is, they have no idea how to express themselves in actionable, discussable, meaningful terms in the debate. All they can do is say I like that bit, I don't like that bit, I really think we should leave it the same, because ultimately, there are two things there. One of the magical bits about this is you can offer people more than a leading question and a 24/7 widget for enough weeks that you can say that you consulted with the public. You can do more than that, and at the point where people are actually going to something where they can move stuff around and discuss things and collaborate creatively (which the technologies and infrastructures now all over will support) then you have people collaborating on a problem solving thing, rather than arguing about a take it or leave it proposition; and that is a fundamental difference. And that's one of the reasons I'm talking about the change not being that participation is easier but that it is more competent. Part of that competence is that, that medium can use people 'participating' to help each other figure it out. Right, it's getting the Christmas tree up, rather than fighting over whose fault the fender-bender is. At the point at which people are empowered to do something, and they're empowered to do it

together then it's not just the status quo, or whatever. The point at which changes to the built environment on a constructive, collaborative project including the people who are going to be stuck with the consequences, you actually have a viable, ethical (in the public sector), and strategic and indeed a viable, sort of collaborative self-marketing proposition for the private sector.

- […] Do you see this lack of customer participation in commercial architecture changing in the future?

I think that, at a certain point for certain kinds of things, it's going to make very good business sense for companies that do a lot of building within the limits of their brand identity, and functional requirements and the law, to invite their customers (at current or prospective) to participate in so to speak fantasy design. So I mean something like a health club, a gym, would be a classic specimen because a lot of them are very badly laid out in ways that you just don't think about, and what the optimal layout is of such a thing and what particular proportions and distribution of particular facilities and services and so on and so forth, need to happen or how they might evolve in the next do over, that would be great. But it would not be so much necessarily to say okay, you get to design the next thing and we'll build exactly what you say. It might be, you know we're thinking about how these things evolve, and who's got ideas about what this might be like in a perfect world or even in this world a little bit more so in 10 to 25 years down the road. So imagine that kind of thing would make a tone of sense as a marketing communications effort and also as a predesign effort. Then comes the time when you're doing the next shop, and your architects and engineers and designers can have direct access to that rich body of **--- POOR CONNECTION ---** they're going to need to get next to the customers and give them a place to you know, doodle. And that is a doable job but it is, I mean for god's sakes Singapore got there a generation before we have. So we've got some work to do.

- And I suppose BetaVille will be there along for the ride?

BetaVille or something very much like it. But that will depend on the particular situation. But *BetaVille* is certainly ready for people who want to try it on […]

Carl Skelton, Director of BetaVille

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