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Whole Circles: A Leadership Model to Support Expanded Roles for Circular Textile Designers

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Keywords:	circular textile design; design research; leadership; reflection; auto ethnography; models
Abstract:	<p>As the field of circular textile design emerges, researchers are questioning what skills designers will need to enable the new systems, processes and products to successfully loop back in to subsequent lifecycles. Circular textile design differs from traditional textile design because it asks the designer of the textile to not only create a new material, but to prioritise the use and end-of-life of the product at the outset. This requires the designer to not only understand more about the processes of production, use and disposal, but much more about the people in these new systems too.</p> <p>In this article, the author draws upon first-hand experience of evolving from the making of circular textiles, to supporting others to make circular textiles. Reflecting on the leadership role of being the Director of a University research Centre (UrC), the article goes in search of a model to generate and share the insights derived from developing from a textile design researcher to a leader.</p> <p>The methods involved a form of triangulation using the recognised attributes for success of a high-performing research unit (HEFCE 2015), along with leadership signposts created by an experienced corporate manager (Baron 2016), with reflections by the author on the experiences at the UrC across a 5-year period. Working with input from Baron, the author extended her research practice to include an autoethnographic study, from which questions and key insights are extracted. These insights were then used to redesign the HEFCE model.</p> <p>The transferrable Whole Circles model presented at the end of the article proposes that textile designers seek to ensure they have a good understanding of themselves as people, so that their leadership style is empathic and grounded. It also proposes a 3-dimensional form which supports the growth of other researchers to lead in their own expertise areas.</p>
Order of Authors:	Rebecca Earley, MA

Figure 2



Figure 1



- Pre-requisite
- Enabling

Figure 3

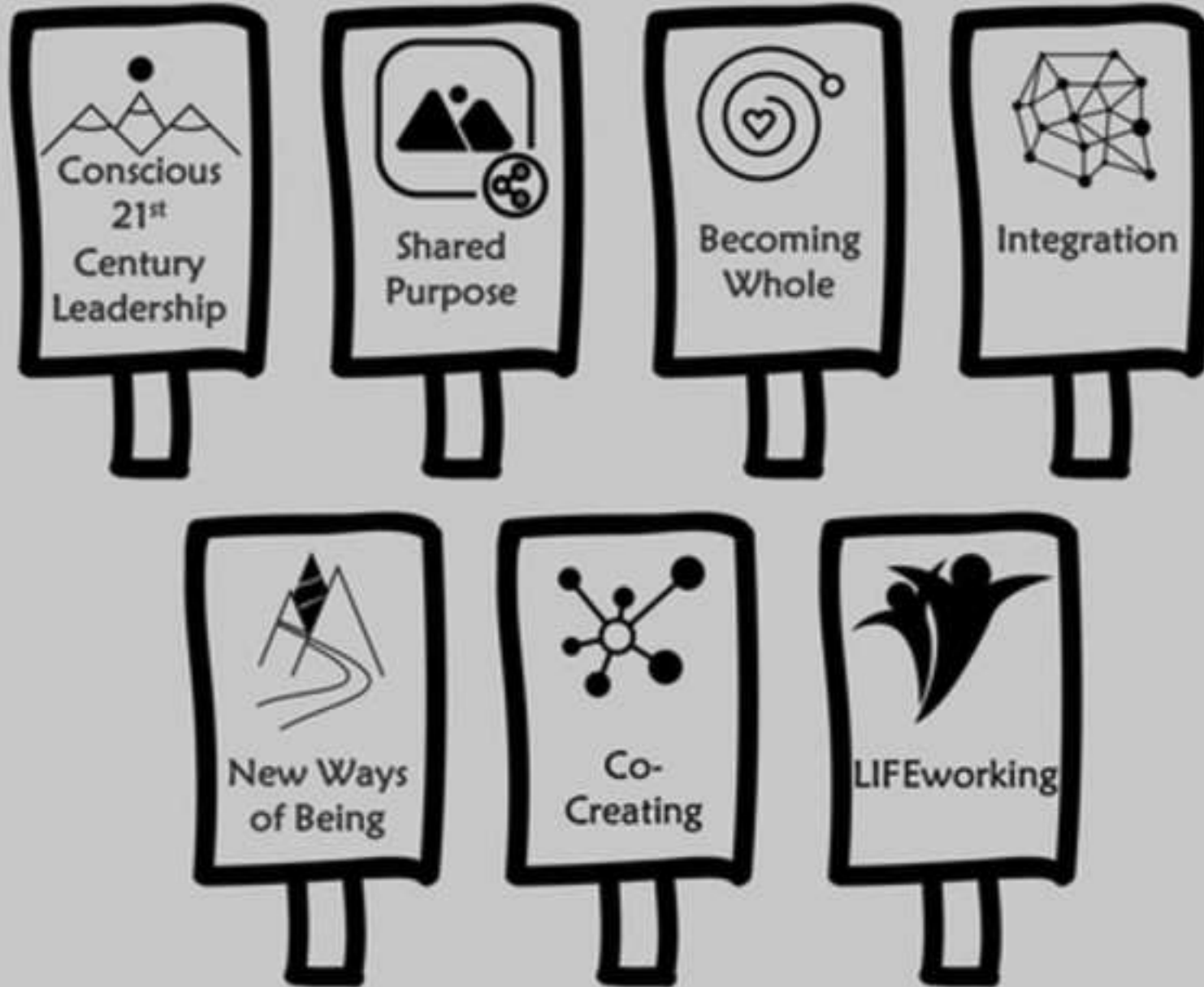


Figure 4



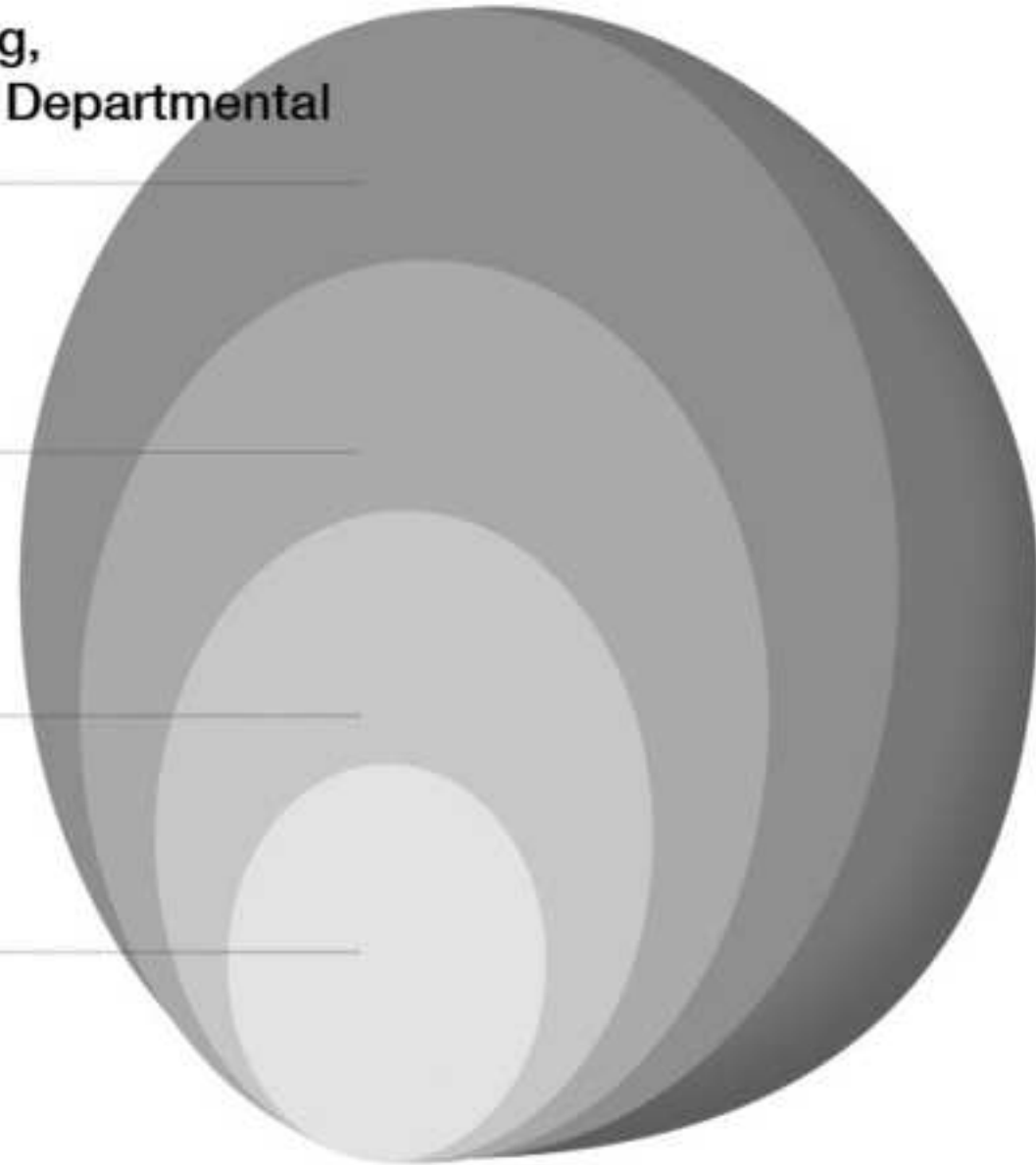
Figure 5

**Strategy, Funding,
Institutional and Departmental
Practices**

**Collaboration
and Networks**

**Culture
and Values**

People





Whole Circles: A Leadership Model to Support Expanded Roles for Circular Textile Designers

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Table 1

HEFCE Attributes	Barons' Signposts	Author's Questions
People & Leadership	Conscious Leadership, Integrating the Team & Becoming Whole	<i>Q1. How can I lead this research centre, meeting all the objectives I have been set? Q2. How can I make sure all members get involved in the centre and projects? Q3. How can I become a whole self when I am so many different things to so many different people here?</i>
Culture & Values	Creating a Shared Purpose & LIFEworking	<i>Q4. How can I develop a shared purpose for the centre and its members? Q5. How can I work at living, rather than live to work; and how can this become a healthy way for my research team to work too?</i>
Collaboration & Networks	Co-Creating Communities	<i>Q6. Who do we want to work with and why?</i>
Strategy & Funding; Institutional and Departmental Practices	Finding New Ways of Working	<i>Q7. How can I work differently to support the diverse interests of group?</i>



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10 **Whole Circles: A Leadership Model to Support Expanded Roles for**
11 **Circular Textile Designers**

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Whole Circles: A Leadership Model to Support Expanded Roles for Circular Textile Designers

Abstract

As the field of circular textile design emerges, researchers are questioning what skills designers will need to enable the new systems, processes and products to successfully loop back in to subsequent lifecycles. Circular textile design differs from traditional textile design because it asks the designer of the textile to not only create a new material, but to prioritise the use and end-of-life of the product at the outset. This requires the designer to not only understand more about the processes of production, use and disposal, but much more about the people in these new systems too.

In this article, the author draws upon first-hand experience of evolving from the making of circular textiles, to supporting others to make circular textiles. Reflecting on the leadership role of being the Director of a University research Centre (UrC), the article goes in search of a model to generate and share the insights derived from developing from a textile design researcher to a leader.

The methods involved a form of triangulation using the recognised attributes for success of a high-performing research unit (HEFCE 2015), along with leadership signposts created by an experienced corporate manager (Baron 2016), with reflections by the author on the experiences at the UrC across a 5-year period. Working with input from Baron, the author extended her research practice to include an autoethnographic study, from which questions and key insights are extracted. These insights were then used to redesign the HEFCE model.

The transferrable Whole Circles model presented at the end of the article proposes that textile designers seek to ensure they have a good understanding of themselves as people, so that their leadership style is empathic and grounded. It also proposes a 3-dimensional form which supports the growth of other researchers to lead in their own expertise areas.

Keywords: circular textile design; design research; leadership; reflection; auto ethnography

Subject classification codes: design management; design research; fashion and textiles; sustainable design; recycling

1 **Whole Circles: A Leadership Model to Support Expanded Roles for**
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3 **Circular Textile Designers**
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7 **1 Introduction**
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9 Circular textile design is an opportunity for the discipline as a whole to foster new kinds
10 of design practice, and leadership approaches. Textile designers are not known as leaders.
11 Traditionally, textile designers have occupied roles that support other practices – fashion
12 design, for example. They have occupied roles that have been framed as part of a system
13 – they have been active in only one part of a complex supply chain. Yet in the last 20
14 years textile design education and practice has been transformed as industrial and research
15 cultures have responded to rapid technological, environmental and social change. Whilst
16 we can now see many textile design practitioners, educators and researchers engaging
17 with the global issues inherent in the industry, overall there is still a lack of *leadership*
18 coming from textile designers in the sector.
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29 Recent graduates are leaving education with little in the way of models that will support
30 them as they work to change the status quo. Designers may look to design gurus like Ideo,
31 MIT, or Lancaster’s Innovation Lab, for examples of how their skills can be applied to
32 challenges beyond the material. Yet, they will often be referencing models created to suit
33 other needs, at times based on values that directly oppose the ambition to contribute to a
34 more sustainable, circular industry.
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42 This article primarily draws upon the experience and reflections of the author, a textile
43 designer and the Director of a University research Centre (UrC). The study was created
44 by using three points of reference:
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- 49 I. A conceptual model (HEFCE 2015)
- 50 II. A corporate leadership model (Baron 2017)
- 51 III. The author’s reflections on the development of the UrC
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56 The aim was to generate insights to create a new model to support design leadership in
57 the circular economy. In the first instance, the author evolved a revised version of the
58 HEFCE model which quickly lead to the final version – the *Whole Circles Model* -
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intending to provide researchers, practitioners and managers working in circular economy projects with guidance on how to step up to the leadership roles the industry and planet urgently needs.

2 Context

How do we define leadership? The Oxford English Dictionary gives us these definitions: *The action of leading a group of people or an organization. The state or position of being a leader.* In this article, leadership is being discussed in the context of a University and a University research Centre (UrC). The group of people being led are the researchers and the support staff. These include PhD researchers, early career researchers, Readers and Professors, administrative assistants, research and communication assistants and project managers. We can assume the work of an UrC directly feeds in to the industry through research and enterprise activities, as well as the development and delivery of content to design courses and the curriculum. This then supports the knowledge and experience base of the under- and post- graduate students as they move in industry jobs and up the career ladder. Leadership of an UrC influences research culture which supports the education and industry sectors.

2.1 *The Circular Economy and Leadership*

New leadership approaches are needed to create more resource efficient models – like the ones the Ellen MacArthur Foundation (EMF) has proposed - where people will be required to significantly change their habits and behaviours. In order to plan future material loops and cyclability new processes and systems are needed which will require textile designers to embrace expanded roles as their material outcomes drive change.

Tamsin Lejeune, founder of the Ethical Fashion Forum (EFF) recognises the major anxieties of our time in her online article, ‘The New Leaders: An Inspired Approach to Business Leadership’:

‘Climate change has placed our planet in jeopardy – and globalisation has resulted in massive levels of inequality across our global society – and the gap is widening. The role of business ... has become infinitely more powerful and influential on a global scale.’ (Lejeune 2016)

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2 Leaders in the fashion and textile industry have significant responsibilities when we
3 consider, as Lejeune says, that ‘Walmart’s revenues are bigger than the GDP of Norway.’
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5 Traditional industry leadership approaches place importance on position and productivity
6 above people, like Maxwell’s infamous *Five Steps* (2011); however, in the same way that
7 the field of sustainability has evolved away from symbolism, to material, to process and
8 systems (Buchanon 2001, in Irwin, Kossoff, Tonkinwise 2015:4) and the shift therefore
9 to a design for social equity (Manzini 2015), recent leadership approaches have become
10 more people-centric, like the well-cited Mackey & Sisodia’s *Conscious Capitalism*
11 (2014). This people-centric shift is evident in both the HEFCE model and Baron’s
12 signposts (see 2.3 and 2.5 below).
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21 **2.2 Textile Designers as Leaders: the unethical past and present, and the circular** 22 **future**

23 The industrial revolution in C19th UK textile trade brought jobs for women performing
24 sequential textile manufacturing tasks, in line with their subservient social status. Carried
25 through to education and the curriculum, this categorisation and sub-categorisation
26 resulted in textile design being distanced from the whole picture of the industry they were
27 part of. In many ways textile design as a field has remained predominantly female and
28 second-class in status (when compared to others dominated by men, like architecture for
29 example), and women in the manufacturing and production parts of the supply chain
30 continue to be unfairly treated:
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41 ‘Around 80% of Vietnam’s 700,000 factory workers are women. Women tend to be
42 sewers and helpers, while men are usually in higher paid occupations working as
43 cutters and mechanics. Men are three times more likely than women to be
44 supervisors. Women tend to work longer hours than men and are less likely to be
45 promoted or receive training, even when they have been working at the factory
46 longer than men. Women are also in poorer health, and women’s average hourly
47 wages (excluding bonuses) are just 85% of men’s. Female garment workers also
48 reported less leisure time than men, because gender dynamics at home remain the
49 same; women are working full time while retaining full time responsibilities in the
50 home.’ (Rees 2017)
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It is because the textile supply chain has this history and current conditions prevail that the need for more leadership from textile designers is urgent and pressing; all actors involved in exploitative supply chains like these need to do what they can to change unethical practices (Rakestraw 2013).

The future of the industry and field of design may rely on fully embracing the principles of the circular economy – for resource scarcity may drive price increases and force the industry to seek new material loops, processes and systems. The opportunity is for textile designers to embrace expanded roles; to understand and prepare for these roles textile designers need to consider leadership in an industry where traditionally they have been taciturn (Igoe 2015:78), recognised as needing support to ‘step out’ of the studio and connect with industry and society (Heeley & Press 1997).

There are some examples of leadership by textile designers that we should note. The Finnish Armi Ratia of clothing brand Marimekko, set out to ‘to create something radically different with beauty and longevity to give hope to the grey mood of post-war Finland.’ Trained as a textile designer but with a background in advertising, she was married to Viljo Ratia who bought a textile printing factory in 1949, and turned the manufacturing business into the iconic Finnish clothing label. As an outspoken face for the label, she became known for ‘...taking personal risks and being completely indifferent to economic success’ and ‘avoiding fashion’. She empowered her workers, ‘...designers and machinists were given freedom to make decisions, even if those decisions turned out to be unprofitable.’ (Guerrero 2013:427-430).

Contemporary leadership in the field may come through textile design and practice, but not be labelled as such. Suzanne Lee, trained as a fashion designer, author and researcher (for a time at the UrC in this study), developed a radical new material for clothing from fermented green tea, wore it for a TED talk to wide acclaim, and went on to be Chief Creative Officer for innovative science-engineering lab, Modern Meadow in New York. She is the ‘poster-girl’ for the emerging bio manufacturing movement, inspiring and actively supporting material and textile designers across the globe.

Textile designers who use material enquiry to create larger change include Dr’s Louise Valentine and Faith Kane. Valentine has evolved her own practice to include the

1 exploration of ‘mindful’ and ‘meaningful’ textile design approaches (Valentine 2011;
2 Valentine, Ballie, Bletcher, Robertson, Stevenson 2017) as well as being Head of
3 Entrepreneurship, Enterprise and Employability and Programme Director of Design for
4 Business MSc, at the School of Art and Design, University of Dundee. Valentine is also
5 editor of The Design Journal and Chair of the European Academy of Design (EAD).
6 Kane, previously based at Loughborough University and now at Massey University in
7 New Zealand, has pursued ideas through new materials through laser, digital technology,
8 sustainability and ‘textile thinking’ (Kane & Philpot 2016), as well as being a founder
9 editor of the Journal of Textile Design Research and Practice. Both Valentine and Kane
10 have ‘stepped out’ of the studio and evolved key leadership roles in the field of textile
11 design.
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22 **2.3 The HEFCE Model**

23 In reviewing submissions from the Research Excellence Framework (REF) 2014, the
24 Policy Institute at King’s College London and RAND Europe, considered UK research
25 units in universities and higher education institutions in terms of their performance. They
26 were looking for the key attributes and common characteristics that make such units
27 successful, in REF terms. In the report, the HEFCE model *Attributes of High-Performing*
28 *Research Units* (2015:7), puts people in the middle of the circle surrounded by strong
29 leadership, culture and values - and proposes that these are pre-requisite factors for
30 success. Strategy and funding was positioned as *enabling* factors, along with
31 *collaborations, networks and institutional practices*. (Figure 1)
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42 The author had, prior to this, found few models that contextualised all the aspects of
43 leading an UrC in to one scheme. The attributes that were highlighted in the report
44 resonated with the unvoiced experience of the author. So many new aspects had taken the
45 author by surprise; no training course prepared the author to be a researcher and also
46 manage people, funds, space, difficult situations. The REF had also been such an
47 important process during this period of time, yet had been such an alien experience for
48 many textile design researchers in the UrC who were still working out what constituted
49 and differentiated research from innovative practice. The dividing line between these two
50 things had ended up dividing people, quite literally, as the line managers of the UrC
51 sought to refine membership to fit the requirements of REF. Yet, despite these difficulties
52 the UrC had achieved considerable success. It seemed important to understand how that
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1 had happened, and what learnings could be shared, particularly as the process had begun
2 to set up a new UrC in a different college base.
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5 **2.4 The University research Centre (UrC)**

6 The work at the UrC during the period of this study focused on practice-based and design-
7 led textile research towards a sustainable fashion textile industry. Inspired by the HEFCE
8 model, the author has reflected upon building the UrC and delivering sustainable fashion
9 textile projects across a five-year timeframe (2011 - 2016).
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16 The HEFCE model was published at the end of the five-year period covered by this study.
17 The author's UrC was not one of those that took part in the research that formed this
18 study, but was rated as a high-performing unit within the host University. (It was the most
19 financially profitable of the nine UrC across the 5-year REF period). Many of the
20 characteristics noted in the report (HEFCE 2015:6) aligned with the results experienced
21 in the UrC:
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- 28 • research staff at the UrC had externally funded salaries and a team that had been built
29 carefully by recruiting the best staff and retaining them
- 30 • training and mentorship programmes had been developed by the author to support
31 staff
- 32 • significant resources had been invested in developing a distinct ethos of social and
33 ethical values (sustainable textile design had been the focus of the research since
34 1996)
- 35 • the leader had earned 'accountable autonomy' within the University and had
36 developed strategies that were 'real, living and owned and more than merely a written
37 document'
- 38 • the UrC earned more income per researcher than the average research unit in the
39 University
- 40 • the leader had worked to enable and encourage researchers to initiate collaborations
41 organically as opposed to using a top-down approach
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56 **2.5 Baron's seven signposts**

57 The author used questions derived from a workshop, Skype call and subsequent email
58 sessions with Ayelet Baron, an author whose seven signposts frame this study. Baron
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1 worked with the researchers at the Centre whilst still writing her book, 'Our Journey to
2 Corporate Sanity: Transformational Stories from the Frontiers of 21st Century
3 Leadership' (2016). Her approach was based on many years' experience as an
4 international manager at Cisco Systems Incorporated ('a multi-national corporation, with
5 over 70,000 employees in more than 200 offices around the world, with 85 per cent of all
6 Internet traffic currently traveling across Cisco systems' (www.cisco.com)). This was
7 followed by a period of consulting for companies around the world testing her evolving
8 guidelines for more holistic business approaches. She moved away from her fast-moving,
9 ego-centric corporate position to pursue her belief that work and financial profit, all across
10 the globe, was becoming the key defining feature in everyday life.

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20 'In the 21st century, we can tell a different story, a story filled with so many souls
21 creating and co-creating business with a humane-centered approach, with work
22 being just one element of a meaningful life on the planet.' (Baron 2016:490)
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27 Baron's signposts (Figure 2) were developed to support leadership endeavours that
28 address new problems that are emerging as we enter an era where "people and the planet
29 matter more than ever" (2016: 60), as the increased interest in sustainability and social
30 equity issues evidences. While many organisations are still 'stuck in 20th century
31 practices that promote fear, scarcity and competition', there are already new models in
32 use that promote human-centred design, like Ideo's Design Kit
33 (<http://www.designkit.org/human-centered-design>).
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41 The digital age means that people connect online in new ways and there is increasing
42 transparency in how people receive real time information from multiple sources. The
43 change that is happening is coming from outside of organisations as many people all over
44 the world are shifting how they interact with businesses to build strong partnerships in
45 communities that share purpose (2016: 198). There is an increase in the number of people
46 of all ages who are starting to ask new questions when it comes to organisations they
47 either work for or buy products and services from (2016:485).
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56 The business opportunity Baron identifies is to shift from a world of transactions to one
57 in which we 'authentically connect' with each other for people and planet, as well as
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1 profit. For Baron this means incorporating seven key signposts. She proposes that we
2 need:

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5 ‘1) 21st century conscious leaders who can 2) lead with purpose 3) in whole
6 organizations by 4) integrating teams around that shared purpose, 5) working in
7 new ways through 6) co-creating trusted communities and unlikely partnerships in
8 a world where we 7) LIFEwork (we see life as one big adventure where work is just
9 part of it).’ (2016:499-500)
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16 Researching the book Baron found that it is small companies on the edge that are truly
17 transformational – the smaller size of the niche company means that there is a greater
18 level of flexibility in decision-making and action. Cases covered in the book include:
19 healthcare - *Smart Patients* founded by Roni Zeiger, previous Chief Health Strategist at
20 Google, <https://www.smartpatients.com>, (2016:84-90); children’s wear - Shamina
21 Dhana, Founder of Dhana Inc., <http://www.dhana.com> (2016:224-230); information
22 technology - Jim Love, CIO IT World Canada, <https://www.itworldcanada.com>
23 (2016:216-222). Some of the big multinationals are engaged in transformational
24 leadership too, but many of them are still at the beginning of a journey and they tend to
25 use the principles of 21st century leadership more as a marketing slogan than as a driver
26 for strategic change.
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38 **3 Methods and Design of the Study**

39 This research represents a significant departure for the author, away from using *making*
40 *textiles* as the primary means of gaining new knowledge, to using writing and reflection
41 on the actions of *supporting the making work of others* as the basis for the study. As such,
42 it does not represent a change in direction, but rather a broadening of the methods that
43 support the core practice. The textile designer can make, can enable, and can therefore
44 lead – all as part of the role of being a designer in the twenty-first century. The author
45 sought new methods to support the desire to bring a personal narrative in to a design
46 practice in order to create new knowledge and transferrable models.
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56 **3.1 Textile Designers and Auto Ethnography**

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Auto ethnography is a method that is growing in use amongst textile researchers, as they feel an urge to try to write about the things that often they do and make instinctively, in order to better understand its value and potential cultural impact.

I decided to conduct a review of the process of establishing the UrC itself and key projects within this timeframe as it seemed to me that both the *process* of reflecting and writing about the experience, and the text I produced with the model I could create from it, would be original and of value to others. ‘A researcher uses tenets of autobiography and ethnography to do and write auto ethnography. Thus, as a method, auto ethnography is both process and product.’ (Bochner & Ellis 1992).

The call for textile designers and researchers to become more vocal and engaged (Heeley & Press 1997) has been one to which I responded throughout my career, but with the response previously being primarily through action rather than written reflection. Provocation through the creation of new artefacts for exhibition formed the basis of methods for most of my previous research outcomes, but during the 5-year period of leading the UrC new knowledge was generated through the writing of strategy documents required by the host University. In other words, the annual reports and funded project report requirements enabled me as a practice-based researcher to find ways to generate new knowledge.

Workshops, with invited external speakers and coaches, provided me and the other researchers at the UrC with new methods and skills. I wrote, and gave keynote talks at conferences, about the value of these new communication, management and facilitation skills for textile design practice and the field of sustainability and research (██████████ 2016; ██████████ 2014). These outputs required methods of reviewing the knowledge that had been created, and understanding how this had supported the participants. This was done through surveys, informal interviews and discussion sessions. Yet to enable me to go deeper in to this particular period of growth and development as a leader, a new method was needed. It was not enough for me to just write thoughts and reflections down. It needed to be a process that was deep, thorough and rigorous, and result in something usable, like a transferrable model.

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In writing about design and research decisions and textiles made previously, and the shifting of boundaries that happened as a result, it brought me ‘...closer to the truth of lived experience and more scientifically valid than more detached and seemingly more objective methods.’ (from Goett’s *Materials, Memories and Metaphors: The Textile Self Re/collected*, in Jefferies, Wood Conroy, Clark 2016:125). Auto ethnography is, quote, ‘an approach to research and writing that seeks to describe and systematically analyze (*graphy*) personal experience (*auto*) in order to understand cultural experience (*ethno*).’ (Ellis, Adams & Bochner 2011). At its best, it ‘acknowledges and values a researcher’s relationships with others’ and ‘uses deep and careful self-reflection’ (Adams, Holman Jones & Ellis 2015:2) to bring new knowledge to the fore.

As a research method it is often critiqued (for its perceived lack of scientific value), but it also is becoming known for its value to humanities research, where the researcher is a commentator on a situation for which they have no first-hand experience. If the researcher can get past the accusation of ‘narcissism’ and ‘dullness’ they can find the telling of their own stories really useful and effective, particularly with research which aims to have a cultural impact (Campbell 2017).

3.2 *Designing the Study*

The four elements of the study were created in sequence, beginning with the HEFCE report being published in 2015, followed by the author’s interest in reviewing the UrC work (in order to propose a new UrC with a focus on circular design).

- I. HEFEC Report (2015)
- II. Baron’s Signposts and the UrC Workshop (July 2016)
- III. Author’s auto ethnographic process (August 2016):
 - Writing #1 – author wrote lengthy notes after the workshop
 - Discussion –a Skype discussion between the author and Baron created the questions for the study
 - Writing #2 – author wrote reflective text, using the questions to structure and guide the writing
 - Response – Baron wrote responses to author’s writing
- IV. Analysis & Modelling (September – November 2017)

1 The workshop at the UrC with Ayelet Baron in July 2016 (Figure 3) introduced the seven
2 signposts to the researchers, enabling them to apply the thinking to their own individual
3 design approach whilst aiming to create a shared vision for the UrC. One task asked the
4 participants: What is my purpose? What makes my heart beat? Many answered in terms
5 of making a contribution to the field of design and sustainability: *Creating change using*
6 *the power of design; Reflection to create philosophical direction; To constantly question*
7 *and reframe the problems we are trying to solve in the Centre; Progressive change for*
8 *people and planet. Some participants also answered in terms of the group, recognising*
9 *that their purpose was: To make a positive contribution to helping others to achieve a*
10 *common goal; Understanding how things work so that I can help enable change towards*
11 *a 'happier' future for all; To contribute to my community (...).*
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23 Both sets of answers were of interest to me, demonstrating that the UrC researchers were
24 both focused on the sustainable design agenda for textiles, as well as expressing an
25 understanding and desire to participate in a community, the UrC.
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31 One month later, through Skype calls, I drew up seven questions with Baron's help, which
32 aligned my experiences with her seven signposts. I then used these to reflect on my
33 experiences of both building the UrC and leading funded design research projects. The
34 10,000-word text I wrote was used to draw out a series of insights and observations. These
35 were then placed into a full-length working table format that was created to enable
36 analysis through triangulation with aspects of the HEFCE model, and finally, the new
37 models.
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45 **3.3 Analysis and Modeling**

46 The triangulation metaphor used in research originates from navigation at sea, land
47 surveying, and construction and in research has become a powerful technique that
48 facilitates validation of data through cross verification from two or more sources. 'In
49 particular, it refers to the application and combination of several research methods in the
50 study of the same phenomenon'. (Patton, 1999). Triangulation was used in this study not
51 to test for consistency, but to find points of connection and correlation between three
52 sources and methods, in order to structure and strengthen the insights and ideas from the
53 reflective writing process.
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1 The modeling process – revising the HEFCE model – required me to revert to a
2 sketchbook for a period of working alone in the studio, considering what the insights
3 meant in terms of shape and form, and using a pencil to redraw the model time and time
4 again, before taking the final sketches in to Photoshop to create a graphic version. This
5 return to a practice-based technique was familiar and reassuring, and it also felt inevitable
6 and essential. My leadership supports the practice of members of the UrC, and the results
7 of this study show how important maintaining and building my own practice work is, for
8 them and for myself. This became key to the sense of *wholeness*, as the results discussed
9 below show.

10 11 12 13 14 15 16 17 18 19 20 **4 Results**

21 Table 1 shows Baron’s signposts mapped against aspects of the HEFCE model, and the
22 original questions that were created for the study.

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27 The HEFCE characteristics were used to form four areas for discussion in this article:
28 people, culture & values; community and network; and strategy, funding and
29 institutional/departmental practices. Baron’s seven signposts formed four themes for this
30 study which correlate with the four areas from the HEFCE model: Creating and Leading
31 an Inclusive Centre and Being Whole Within it; Developing a Shared Purpose, which
32 includes Working at Living; Co-creating Communities and Finding New Ways of
33 Working.

34 35 36 37 38 39 40 41 42 **4.1 People**

43 Baron’s signposts that were applied here were *Conscious Leadership, Integrating the*
44 *Team & Becoming Whole*. When considering questions for the HEFCE circle of ‘People’
45 the idea of the leader as a person, and leadership as an agreement and relationship between
46 people, came to the fore. Unlike the HEFCE model, where leadership was separate to
47 people, and less central, Baron’s signposts encourage leaders to be the most ‘whole’
48 person possible – supporting others and the self to achieve the best results. The questions
49 developed from this part of the study were:

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56 *Q1. How can I lead this Centre, meeting all the objectives I have been set?*

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65 *Q2. How can I make sure all members get involved in the Centre and projects?*

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Q3. How can I become a whole self when I am so many different things to so many different people here?

4.1.1 *Creating and Leading an Inclusive Centre and Being Whole Within it.* The answers to these questions reveal certain things that are of paramount importance for the leader to establish at the outset of the role. These include setting one's own objectives and building one's own team if possible, rather than inheriting these. The business plan must be authored by the leader in order to enable commitment to a vision. The team and membership should avoid being too big, with too many conflicting interests, and too many managers. Integration is an ongoing process – making sure that all people feel included in the UrC's vision, and able to participate as fully as possible.

The leader should aim to surround themselves with people they want to work with and ensure they are properly resourced. Aim to create opportunities for others, above yourself, as a leader – looking for projects that will bring out the strengths of the team. But – key to success – is that the leader also IS the researcher they want to support. 'As Director, you need to lead by example. Make the time to be a researcher – don't just manage others. Create a work and time plan, based on realistic objectives – that ring-fences time to write. And make sure your team know how important it is for you to be absent to do this.'

In order to achieve the above, in particular the last point - it's important to know when to bring in the managers. 'If new ventures mean more time and commitment, and new knowledge levels or greater degrees of administration, identify the limits of the team and work towards getting in extra support.' Learn to delegate well, as spreading the load and knowing when it's time to ask a team member to take on more responsibility is part of delivering a vision for all the people in the UrC.

The vision of the UrC should include developing projects with open briefs to support broad participation by members – researchers of all levels should be able to contribute – and the participants should develop practices where group reflection and knowledge exchange is a regular occurrence. This way of working improves many aspects of an UrC by making the people in it feel supported, heard and understood, but also serves the group well when difficult situations arise. The leader needs to set an example through how they communicate, to encourage the members to see communication between people as

essential to good research practice.

In order to support the members of an UrC in becoming better researchers the leader needs to ensure that coaching, mentoring and training are regularly delivered and reviewed as part of the appraisal process. Personal growth and development are key to original research – for the members as well as the leader. ‘Learn new things together. As a leader, as you learn, so you can share.’ Becoming whole is about being your best self – inside and outside of work – and not separating too much the way that you present yourself in these contexts. Progressive leadership in industry is about being ‘authentic’. From the experience of the author, this particular approach proved to be the most successful in enabling the UrC to recruit good people and retain them, which HEFCE recognize as key to high performing units (2016:6).

Finally, the last insight is about developing a sense of limits or boundaries to *other people* who make demands of the leader. It became clear through the reflection process that “growing a thicker skin” was important to being able to counter certain pressures arising from people both within and without the UrC. “You can’t please all the people all the time”. Finding a balanced view on what can be done for oneself and for others will enable a leader to sustain a role, whilst also developing vision and ambition within the membership.

4.2 Culture and values

Baron’s signposts that apply here are *Creating a Shared Purpose & LIFEworking*. When considering questions about culture and values, the following questions were developed:

Q4. How can I develop a shared purpose for the Centre and its members?

Q5. How can I work at living, rather than live to work; and how can this become a healthy way for my research team to work too?

4.2.1 *Developing a Shared Purpose, which includes Working at Living*. What emerged through these questions was that a desirable internal culture – especially when exploring circular economy ideas – was a highly collaborative one, and that every collaboration should be seen as an outcome in its own right. “*Collaboration means making time to bring people together to co-create a shared purpose.*” It was felt to be important to work out the details of collaboration upfront. “*Don’t work it out as you go along – sit down and*

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2 *talk through the potential outcomes and ownership issues, as well as the methods and*
3 *processes. Find the foggy bits, and note them.”*
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5 When it was not possible to work this way – members had different approaches and could
6 not collaborate easily on ideas – a much more disjointed and less comprehensive set of
7 results were presented at the end of projects. In some cases, members left the UrC to set
8 up their own hubs or groups; and whilst this is not necessarily a negative outcome, building
9 and growing an UrC that is ‘high-performing’ would not be possible if members did not
10 ascribe to the culture and values that exist at the heart of the organization.
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18 Democratic decision making and systemic development in an academic context is
19 important to trust and collaboration efforts. *“Academic research loves to hold up its high-*
20 *achievers, its philosophers, its award-winners. But these individuals are becoming rarer*
21 *as the environment changes. Embrace diversity and enable progression across the board.*
22 *And if the academic system seems outdated, challenge it to change.”* Research leaders
23 need to make fairness, equality, accessibility and generosity central to the group’s
24 collaboration ethos.
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33 The reflective texts revealed that spending time together as a team was important to how
34 the culture and values developed at the UrC. Eating meals together – at work, on trips,
35 and for social events helped researchers to debrief and ‘digest’ the activities and ideas.
36 The informality of these events built an understanding for all that was hard to capture
37 through other feedback routes. *“Formal feedback mechanisms rarely capture the human*
38 *interactions.”* Likewise, working together outside of the physical office space was
39 beneficial, as *“we connect differently in different spaces – and by being connected we are*
40 *more resilient.”*
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49 In terms of resilience, the culture and values need to seek to sustain researchers as well
50 as project outcomes, aiming to *“Look after each other. Know what each individual needs*
51 *– what makes them happiest and what will make them flourish. Support their efforts.”*
52 The notion of liking and enjoying your work sounds obvious, but if practice-based
53 researchers only produce written outcomes like journal articles, their unique offer to the
54 field is at risk when it needn’t be, *“...our field of practice-based textiles research we have*
55 *the flexibility of defining it for ourselves.”* The culture needs to support a range of
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practices and approaches, and the leader can find ways to ensure time and work load planning takes into account creative, hands-on action.

Finally, stress can negatively affect a culture and it was found to be something that needs to be openly discussed and addressed, and even monitored. Whilst insights like these fall into the category of *Human Resources* at an organization, and many measures are provided to support researchers centrally, an UrC culture can also enable a healthy balance for its members, which in turn enables strong levels collaboration, trust, knowledge exchange, generosity, understanding and creativity to be maintained.

4.3 Collaboration and networks

Baron's signpost that was most relevant for the author here was *Co-Creating Communities*. The internal collaborations seen above will naturally foster external collaborations which lead to more developed networks. Baron sees these as "trusted communities and unlikely partnerships". (2016:XX) For the author, the UrC had a large membership served by people that were all well connected, so this question was less about building these communities from scratch, and more about being selective with time, energy and resources. *Q6. Who do we want to work with and why?*

4.3.1 *Co-creating Communities*. Through the reflective process the author realised that the first step in this process was to enable the people in the UrC "*be conscious of the need for community*". For academic researchers an UrC can often feel like enough of a community in its own right – isolated study being the basis of traditional academic pursuits – but external networks and communities are the lifeblood of research connected to the circular economy, as the ideas are most often applied and needing context. Also, all major funding calls require a great degree of cross-sectoral collaboration and these most often come from trusted communities and networks that have taken time to develop. The reflective texts also highlighted the need to "*understand the community through the local and global lens.*"

It was vital that the UrC and its members were properly represented online and fully visible. Clear and evidenced statements supported by links to strong research outcomes would mean that the community and network could then self-select. "*Be abundantly online. Don't worry about over-sharing online. Ideas are just ideas; actions actually*

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make things real. By building your audience you will receive feedback, support and new approaches.” This can also mean changing the language – shifting it away from an academic style to a more generalist audience. This is hard for a group of people to do and needs strong leadership, creative direction, and lots of consultation. “Communicate your success. Traditionally research under-sells itself. It doesn’t seek a broad audience, for fear of devaluation. It’s important to show yourselves and the world what you are doing and bring them with you on your journey.” Ask researchers to be accountable for communicating the work of the UrC as well as their own ideas, in both formal and informal contexts. “The team need to understand milestones and work openly towards them – presenting them brings new insight and feedback during the project process, rather than just at the end.”

What became most interesting about this part of the study was that when some of the community became real – not online but in the room – what had been previously regarded as different communities quite easily became one. The sense of potential for sharing ideas and approaches was greatly increased in situation where co-creation took place. *“Find ways to connect up the different community groups. Explore the potential of bringing groups together to create new synergies, ideas and maybe projects.”* This highlighted the need for developing both online and offline communities in quite different ways, for the way in which they benefit the research – as well as the research benefitting them – is changing through real time interaction with the ideas.

4.4 Strategy, funding, institutional and departmental practices

These attributes are presented in the HEFCE model as desired, but not a pre-requisite, for high performing research centres. In many ways reflections on these aspects could form their own study, as practice-based design research is lacking in useful guidance in this area. For this article, the author focused here on one question, framed by Baron’s signpost *Finding New Ways of Being: Q7. How can I work differently to support the diverse interests of group?*

4.4.1 *Finding New Ways of Working.* Up to this point in the study the subject of funding and finances had not been expanded upon, yet as most researchers working today will recognise, the opportunity to lead may only come through a project with funding attached. Financial resources underpin performance levels in the UrC, as it buys time to explore

1 and develop new ideas that can evolve into bigger projects. Whilst staff on teaching
2 contracts may produce research outcomes, the time dedicated to teaching duties often puts
3 such enormous pressure on them that unless funding is available to buy-out teaching
4 hours, the time commitment to a research unit is very limited. Finding funding to support
5 staff is a critical part of the leadership role, and can be approached through a strategy that
6 builds a range of projects directed at different levels of research outcomes and activities.
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12 Traditional sources of funding will support communities and networks – at local and
13 international levels (AHRC) – as well as larger community projects (AHRC). Non-
14 traditional sources – like industry partners and independent organisations – can support
15 research that is designed to take new forms, such as Mistra Future Fashion and ‘design
16 researchers in residence’ in companies (Filippa K 2017) and scientific organisations
17 (Ribul & de la Motte 2016). Enterprise work - contract research – can also create ‘seed
18 funding’ opportunities; and even the sale of publications and tools through online stores
19 can enable UrC’s to independently generate income. Centre leaders need to evolve multi-
20 level strategies to attract funding to grow the productivity of its membership.
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31 Finding ways to develop and implement a strategy will often involve meetings – and
32 finding a way to make the most of the many meetings leaders have is key. Meetings can
33 be anything from 1:1 conversations to full committees with agendas – but each one needs
34 to have a clear purpose. The advice from the study was clear – meetings are time
35 consuming but they enable progress: *“if used well, they can provide ‘boosters’ or foot-
36 holds; they can give you the next step up.”* The study also recommended that a leadership
37 strategy should include making aspects of the role recognisable and consistent. *“Establish
38 a series of recognisable leadership tasks for yourself. This creates physical signals to
39 your team about how you are leading.”*
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49 New ways of working in a young field like academic design research may mean that
50 assumptions need examining before proceeding with projects and activities, to ameliorate
51 against cross-sectoral misunderstandings. *“Art Schools are not like science institutions.
52 Design research projects – especially when practice-based – are very different to most
53 science research projects.”* After this, if questions remain unanswered, it is important to
54 know when external support is needed. *“Bring in the experts... Don’t be afraid of
55 reaching out for help – you will gain the respect of your peers, not lose it.”* Art, design,
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1 science research is dynamic and innovative – that is the appeal – “*but we can’t be*
2 *expected to know how to do everything in a culture that is constantly changing.*”
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5 Consider a strategy where your team can offer more than just the research outputs –
6 impacts can be a broad variety of things. Despite the economic and performance pressures
7 that an UrC may bring about, part of a strategy should be about creating a team with
8 optimum membership. Too big, and the role of leading becomes difficult as the people in
9 the UrC all need to make identifiable contributions to the shared vision. “*Collaboration*
10 *has optimum scales – people play a specific range of roles – learn about this and use it*
11 *internally, and externally.*”
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20 When the team dynamics work well, then the learning curve can be great and can provide
21 ample ‘data’ that can be more rigorously reviewed and shared. These endeavours all
22 provide other design research units with new knowledge. “*Make everything you do data.*
23 *Your team is an experiment, as the field is so new. You have much to offer other ‘start*
24 *ups’ in the sector.*” When a team is not working – the leaders’ role is to spot this. “*Not*
25 *all the pieces fit, all the time. Know when to let go... recognise this and make a new*
26 *strategy.*”
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34 **4.5 Summary of Results**

35 This study has revealed that at the heart of a high-performing research unit, people and
36 leadership could be seen one entity, not two separate ones as the HEFCE model shows.
37 Cultures and values are essential in terms of success, with collaboration and network
38 coming afterwards; as culture and values need to be consistent and reliable, whilst
39 collaboration and networks can be flexible and ever-changing. Strategy, funding and
40 institutional and departmental practices provide leaders with new ways of working to
41 support the core focus - people, culture, values - through collaborations and networks.
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51 Significantly, the study highlighted to the author the fact that leaders are people, and that
52 progressive leadership is so much about co-creation and collaboration that individuals
53 working in the UrC must form one whole entity – the centrifugal force of the UrC – with
54 many of them ultimately growing into leaders themselves.
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60 **5 Whole Circles**

5.1 *The Grounded Model*

The first revised model, The Grounded Model (Figure 4), which resulted from the study and discussion, fuses ‘People’ and ‘Leadership’ in to one entity. In this revised model people and leaders are together, and they weight the model – they ground it. In this way, the diverse interests of the group are embraced and the model can evolve outwards in new directions from a stable base.

‘The 21st century leader believes that they serve a greater purpose and that they are contributing to the greater good in business and life. They are moving away from the false belief that you are two separate people, your professional self (work), and your personal self (life). There is only one person, and one flow of life, which happens to include working... They connect with people at a core level, and understand the importance of trust and relationships in every part of their life.’
(Baron 2016:73)

5.2 *The Whole Circles Model*

The HEFCE model was further revised to enable the people at the UrC to evolve their own leadership opportunities – their own cohort of researchers with their own particular take on culture and values that still relate to the UrC. These emerging researchers may then need to develop their own collaborations and networks, and evolve their own circles. This is of course already recognised in industry as good leadership practice – to cascade, to grow, to nurture others to lead.

Figure 5 shows how leadership in the circular economy might take the form of *Whole Circles*. The two-dimensional model has evolved into a three-dimensional model as researchers in the UrC progress into the leaders of their own areas of specific expertise – interests and activities remain connected but diversification and growth is enabled - making the UrC not larger, but more rounded, more globe-like, more aligned with the earth.

In noticing that the nurturing of the growth in impact and reach of other researchers, the author understood that the *wholeness* came not only from connecting leadership and people in the UrC, giving a stable base to work from; but that the wholeness came from an additional dimension. The more the other researchers developed in all areas, the more

1 complete and solid the shape became. The idea of wholeness, of being holistic, is not just
2 a tenet for the leader of the UrC, but is a valuable approach for all the researchers to
3 consider; leading them not away from the UrC as they evolve and grow, but making it
4 more complete whilst still becoming a leader in their own right.
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9 The leader of the UrC, then, is a curator of many leadership efforts. The factor that links
10 of all these efforts is creative practice. The auto ethnographic study revealed the
11 importance for everyone of pursuing practice-led research; and if the leaders of the UrC
12 prioritise it, then the members will too. This emphasis on practice and leadership, on a
13 holistic and whole approach, is key to progressing circular textile design.
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20 In the final stage of the email feedback sequence between Baron and the author, Baron
21 wrote: ‘For many people, taking a holistic approach is challenging because it forces us to
22 examine long-held beliefs. For example, we are used to trying to easily find a single right
23 answer and a short-term solution to address very complex problems. Becoming whole
24 means that we seek opportunities that take into account perspectives that bring us together
25 by showing the whole spectrum of possibilities at our disposal—like scarcity and
26 abundance, efficiency and resilience.’
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33 34 **6 Conclusion**

35 This article attempts to highlight the importance of using the academic space for telling
36 the stories of our research experiences; so that design research leadership can make a vital
37 contribution to addressing the complex challenges of the emerging circular economies
38 and cultures, and more broadly too, in the places where art and science meet and new
39 ways to communicate are needed. Writing about an experience to share with an audience
40 can in itself be seen as a form of leadership as well as producing new knowledge.
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48 These are people-centric challenges – including the negotiation of designers collaborating
49 with scientists towards technical outcomes – and need people-centric styles of leadership.
50 The great potential here is for the next generation of textile designers to emerge as
51 progressive and *whole* leaders, drawing on the discipline’s rich past and the strong female
52 roles that have emerged to date. Too many textile design stories have gone untold already
53 as the discipline has been over-shadowed by fashion and product design statements. Tim
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Ingold encourages us to see our current stories as an integral part of the past and future of the field, writing about the relationship between personal narrative and making textiles,

‘... retracing a path through the world that others, recursively picking up the threads of past lives, can follow in the process of spinning out their own. But rather, as in looping or knitting, the thread being spun now and the thread being picked up from the past are both of the same yarn. There is no point at which the story ends and life begins.’ (Ingold 2007:90, as cited in Jefferies, Wood Conroy, Clark 2016:97)

We need many new models to support the experiences of leading, as well as the telling of leadership stories, by practicing textile designers, to give confidence to individual pursuits and collaborations where the path breaks from tradition, as we work together towards new, circular textile solutions.

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5 **Figure Captions**

6 Figure 1. HEFCE model (2015)
7 Figure 2. Baron's 7 signposts (Baron 2016)
8 Figure 3. Baron's workshop with researchers at the UrC (July 2016)
9 Figure 4: The *Grounded Model* (Earley 2017)
10 Figure 5: The *Whole Circles Model* (Earley 2017)
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13 **Table Caption**

14 Table 1: Triangulation framework for the study.
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Whole Circles: A Leadership Model to Support Expanded Roles for Circular Textile Designers

Abstract

As the field of circular textile design emerges, researchers are questioning what skills designers will need to enable the new systems, processes and products to successfully loop back in to subsequent lifecycles. Circular textile design differs from traditional textile design because it asks the designer of the textile to not only create a new material, but to prioritise the use and end-of-life of the product at the outset. This requires the designer to not only understand more about the processes of production, use and disposal, but much more about the people in these new systems too.

In this article, the author draws upon first-hand experience of evolving from the making of circular textiles, to supporting others to make circular textiles. Reflecting on the leadership role of being the Director of a University research Centre (UrC), the article goes in search of a model to generate and share the insights derived from developing from a textile design researcher to a leader.

The methods involved a form of triangulation using the recognised attributes for success of a high-performing research unit (HEFCE 2015), along with leadership signposts created by an experienced corporate manager (Baron 2016), with reflections by the author on the experiences at the UrC across a 5-year period. Working with input from Baron, the author extended her research practice to include an autoethnographic study, from which questions and key insights are extracted. These insights were then used to redesign the HEFCE model.

The transferrable Whole Circles model presented at the end of the article proposes that textile designers seek to ensure they have a good understanding of themselves as people, so that their leadership style is empathic and grounded. It also proposes a 3-dimensional form which supports the growth of other researchers to lead in their own expertise areas.

Keywords: circular textile design; design research; leadership; reflection; auto ethnography

Subject classification codes: design management; design research; fashion and textiles; sustainable design; recycling

Whole Circles: A Leadership Model to Support Expanded Roles for Circular Textile Designers

1 Introduction

Circular textile design is an opportunity for the discipline as a whole to foster new kinds of design practice, and leadership approaches. Textile designers are not known as leaders. Traditionally, textile designers have occupied roles that support other practices – fashion design, for example. They have occupied roles that have been framed as part of a system – they have been active in only one part of a complex supply chain. Yet in the last 20 years textile design education and practice has been transformed as industrial and research cultures have responded to rapid technological, environmental and social change. Whilst we can now see many textile design practitioners, educators and researchers engaging with the global issues inherent in the industry, overall there is still a lack of *leadership* coming from textile designers in the sector.

Recent graduates are leaving education with little in the way of models that will support them as they work to change the status quo. Designers may look to design gurus like Ideo, MIT, or Lancaster’s Innovation Lab, for examples of how their skills can be applied to challenges beyond the material. Yet, they will often be referencing models created to suit other needs, at times based on values that directly oppose the ambition to contribute to a more sustainable, circular industry.

This article primarily draws upon the experience and reflections of the author, a textile designer and the Director of a University research Centre (UrC). The study was created by using three points of reference:

- I. A conceptual model (HEFCE 2015)
- II. A corporate leadership model (Baron 2017)
- III. The author’s reflections on the development of the UrC

The aim was to generate insights to create a new model to support design leadership in the circular economy. In the first instance, the author evolved a revised version of the HEFCE model which quickly lead to the final version – the *Whole Circles Model* -

intending to provide researchers, practitioners and managers working in circular economy projects with guidance on how to step up to the leadership roles the industry and planet urgently needs.

2 Context

How do we define leadership? The Oxford English Dictionary gives us these definitions: *The action of leading a group of people or an organization. The state or position of being a leader.* In this article, leadership is being discussed in the context of a University and a University research Centre (UrC). The group of people being led are the researchers and the support staff. These include PhD researchers, early career researchers, Readers and Professors, administrative assistants, research and communication assistants and project managers. We can assume the work of an UrC directly feeds in to the industry through research and enterprise activities, as well as the development and delivery of content to design courses and the curriculum. This then supports the knowledge and experience base of the under- and post- graduate students as they move in industry jobs and up the career ladder. Leadership of an UrC influences research culture which supports the education and industry sectors.

2.1 The Circular Economy and Leadership

New leadership approaches are needed to create more resource efficient models – like the ones the Ellen MacArthur Foundation (EMF) has proposed - where people will be required to significantly change their habits and behaviours. In order to plan future material loops and cyclability new processes and systems are needed which will require textile designers to embrace expanded roles as their material outcomes drive change.

Tamsin Lejeune, founder of the Ethical Fashion Forum (EFF) recognises the major anxieties of our time in her online article, ‘The New Leaders: An Inspired Approach to Business Leadership’:

‘Climate change has placed our planet in jeopardy – and globalisation has resulted in massive levels of inequality across our global society – and the gap is widening. The role of business ... has become infinitely more powerful and influential on a global scale.’ (Lejeune 2016)

Leaders in the fashion and textile industry have significant responsibilities when we consider, as Lejeune says, that ‘Walmart’s revenues are bigger than the GDP of Norway.’

Traditional industry leadership approaches place importance on position and productivity above people, like Maxwell’s infamous *Five Steps* (2011); however, in the same way that the field of sustainability has evolved away from symbolism, to material, to process and systems (Buchanon 2001, in Irwin, Kossoff, Tonkinwise 2015:4) and the shift therefore to a design for social equity (Manzini 2015), recent leadership approaches have become more people-centric, like the well-cited Mackey & Sisodia’s *Conscious Capitalism* (2014). This people-centric shift is evident in both the HEFCE model and Baron’s signposts (see 2.3 and 2.5 below).

2.2 Textile Designers as Leaders: the unethical past and present, and the circular future

The industrial revolution in C19th UK textile trade brought jobs for women performing sequential textile manufacturing tasks, in line with their subservient social status. Carried through to education and the curriculum, this categorisation and sub-categorisation resulted in textile design being distanced from the whole picture of the industry they were part of. In many ways textile design as a field has remained predominantly female and second-class in status (when compared to others dominated by men, like architecture for example), and women in the manufacturing and production parts of the supply chain continue to be unfairly treated:

‘Around 80% of Vietnam’s 700,000 factory workers are women. Women tend to be sewers and helpers, while men are usually in higher paid occupations working as cutters and mechanics. Men are three times more likely than women to be supervisors. Women tend to work longer hours than men and are less likely to be promoted or receive training, even when they have been working at the factory longer than men. Women are also in poorer health, and women’s average hourly wages (excluding bonuses) are just 85% of men’s. Female garment workers also reported less leisure time than men, because gender dynamics at home remain the same; women are working full time while retaining full time responsibilities in the home.’ (Rees 2017)

It is because the textile supply chain has this history and current conditions prevail that the need for more leadership from textile designers is urgent and pressing; all actors involved in exploitative supply chains like these need to do what they can to change unethical practices (Rakestraw 2013).

The future of the industry and field of design may rely on fully embracing the principles of the circular economy – for resource scarcity may drive price increases and force the industry to seek new material loops, processes and systems. The opportunity is for textile designers to embrace expanded roles; to understand and prepare for these roles textile designers need to consider leadership in an industry where traditionally they have been taciturn (Igoe 2015:78), recognised as needing support to ‘step out’ of the studio and connect with industry and society (Heeley & Press 1997).

There are some examples of leadership by textile designers that we should note. The Finnish Armi Ratia of clothing brand Marimekko, set out to ‘to create something radically different with beauty and longevity to give hope to the grey mood of post-war Finland.’ Trained as a textile designer but with a background in advertising, she was married to Viljo Ratia who bought a textile printing factory in 1949, and turned the manufacturing business into the iconic Finnish clothing label. As an outspoken face for the label, she became known for ‘...taking personal risks and being completely indifferent to economic success’ and ‘avoiding fashion’. She empowered her workers, ‘...designers and machinists were given freedom to make decisions, even if those decisions turned out to be unprofitable.’ (Guerrero 2013:427-430).

Contemporary leadership in the field may come through textile design and practice, but not be labelled as such. Suzanne Lee, trained as a fashion designer, author and researcher (for a time at the UrC in this study), developed a radical new material for clothing from fermented green tea, wore it for a TED talk to wide acclaim, and went on to be Chief Creative Officer for innovative science-engineering lab, Modern Meadow in New York. She is the ‘poster-girl’ for the emerging bio manufacturing movement, inspiring and actively supporting material and textile designers across the globe.

Textile designers who use material enquiry to create larger change include Dr’s Louise Valentine and Faith Kane. Valentine has evolved her own practice to include the

exploration of ‘mindful’ and ‘meaningful’ textile design approaches (Valentine 2011; Valentine, Ballie, Bletcher, Robertson, Stevenson 2017) as well as being Head of Entrepreneurship, Enterprise and Employability and Programme Director of Design for Business MSc, at the School of Art and Design, University of Dundee. Valentine is also editor of The Design Journal and Chair of the European Academy of Design (EAD). Kane, previously based at Loughborough University and now at Massey University in New Zealand, has pursued ideas through new materials through laser, digital technology, sustainability and ‘textile thinking’ (Kane & Philpot 2016), as well as being a founder editor of the Journal of Textile Design Research and Practice. Both Valentine and Kane have ‘stepped out’ of the studio and evolved key leadership roles in the field of textile design.

2.3 The HEFCE Model

In reviewing submissions from the Research Excellence Framework (REF) 2014, the Policy Institute at King’s College London and RAND Europe, considered UK research units in universities and higher education institutions in terms of their performance. They were looking for the key attributes and common characteristics that make such units successful, in REF terms. In the report, the HEFCE model *Attributes of High-Performing Research Units* (2015:7), puts people in the middle of the circle surrounded by strong leadership, culture and values - and proposes that these are pre-requisite factors for success. Strategy and funding was positioned as *enabling* factors, along with *collaborations, networks and institutional practices*. (Figure 1)

The author had, prior to this, found few models that contextualised all the aspects of leading an UrC in to one scheme. The attributes that were highlighted in the report resonated with the unvoiced experience of the author. So many new aspects had taken the author by surprise; no training course prepared the author to be a researcher and also manage people, funds, space, difficult situations. The REF had also been such an important process during this period of time, yet had been such an alien experience for many textile design researchers in the UrC who were still working out what constituted and differentiated research from innovative practice. The dividing line between these two things had ended up dividing people, quite literally, as the line managers of the UrC sought to refine membership to fit the requirements of REF. Yet, despite these difficulties the UrC had achieved considerable success. It seemed important to understand how that

had happened, and what learnings could be shared, particularly as the process had begun to set up a new UrC in a different college base.

2.4 *The University research Centre (UrC)*

The work at the UrC during the period of this study focused on practice-based and design-led textile research towards a sustainable fashion textile industry. Inspired by the HEFCE model, the author has reflected upon building the UrC and delivering sustainable fashion textile projects across a five-year timeframe (2011 - 2016).

The HEFCE model was published at the end of the five-year period covered by this study. The author's UrC was not one of those that took part in the research that formed this study, but was rated as a high-performing unit within the host University. (It was the most financially profitable of the nine UrC across the 5-year REF period). Many of the characteristics noted in the report (HEFCE 2015:6) aligned with the results experienced in the UrC:

- research staff at the UrC had externally funded salaries and a team that had been built carefully by recruiting the best staff and retaining them
- training and mentorship programmes had been developed by the author to support staff
- significant resources had been invested in developing a distinct ethos of social and ethical values (sustainable textile design had been the focus of the research since 1996)
- the leader had earned 'accountable autonomy' within the University and had developed strategies that were 'real, living and owned and more than merely a written document'
- the UrC earned more income per researcher than the average research unit in the University
- the leader had worked to enable and encourage researchers to initiate collaborations organically as opposed to using a top-down approach

2.5 *Baron's seven signposts*

The author used questions derived from a workshop, Skype call and subsequent email sessions with Ayelet Baron, an author whose seven signposts frame this study. Baron

worked with the researchers at the Centre whilst still writing her book, 'Our Journey to Corporate Sanity: Transformational Stories from the Frontiers of 21st Century Leadership' (2016). Her approach was based on many years' experience as an international manager at Cisco Systems Incorporated ('a multi-national corporation, with over 70,000 employees in more than 200 offices around the world, with 85 per cent of all Internet traffic currently traveling across Cisco systems' (www.cisco.com)). This was followed by a period of consulting for companies around the world testing her evolving guidelines for more holistic business approaches. She moved away from her fast-moving, ego-centric corporate position to pursue her belief that work and financial profit, all across the globe, was becoming the key defining feature in everyday life.

'In the 21st century, we can tell a different story, a story filled with so many souls creating and co-creating business with a humane-centered approach, with work being just one element of a meaningful life on the planet.' (Baron 2016:490)

Baron's signposts (Figure 2) were developed to support leadership endeavours that address new problems that are emerging as we enter an era where "people and the planet matter more than ever" (2016: 60), as the increased interest in sustainability and social equity issues evidences. While many organisations are still 'stuck in 20th century practices that promote fear, scarcity and competition', there are already new models in use that promote human-centred design, like Ideo's Design Kit (<http://www.designkit.org/human-centered-design>).

The digital age means that people connect online in new ways and there is increasing transparency in how people receive real time information from multiple sources. The change that is happening is coming from outside of organisations as many people all over the world are shifting how they interact with businesses to build strong partnerships in communities that share purpose (2016: 198). There is an increase in the number of people of all ages who are starting to ask new questions when it comes to organisations they either work for or buy products and services from (2016:485).

The business opportunity Baron identifies is to shift from a world of transactions to one in which we 'authentically connect' with each other for people and planet, as well as

profit. For Baron this means incorporating seven key signposts. She proposes that we need:

‘1) 21st century conscious leaders who can 2) lead with purpose 3) in whole organizations by 4) integrating teams around that shared purpose, 5) working in new ways through 6) co-creating trusted communities and unlikely partnerships in a world where we 7) LIFEwork (we see life as one big adventure where work is just part of it).’ (2016:499-500)

Researching the book Baron found that it is small companies on the edge that are truly transformational – the smaller size of the niche company means that there is a greater level of flexibility in decision-making and action. Cases covered in the book include: healthcare - *Smart Patients* founded by Roni Zeiger, previous Chief Health Strategist at Google, <https://www.smartpatients.com>, (2016:84-90); children’s wear - Shamina Dhana, Founder of Dhana Inc., <http://www.dhana.com> (2016:224-230); information technology - Jim Love, CIO IT World Canada, <https://www.itworldcanada.com> (2016:216-222). Some of the big multinationals are engaged in transformational leadership too, but many of them are still at the beginning of a journey and they tend to use the principles of 21st century leadership more as a marketing slogan than as a driver for strategic change.

3 Methods and Design of the Study

This research represents a significant departure for the author, away from using *making textiles* as the primary means of gaining new knowledge, to using writing and reflection on the actions of *supporting the making work of others* as the basis for the study. As such, it does not represent a change in direction, but rather a broadening of the methods that support the core practice. The textile designer can make, can enable, and can therefore lead – all as part of the role of being a designer in the twenty-first century. The author sought new methods to support the desire to bring a personal narrative in to a design practice in order to create new knowledge and transferrable models.

3.1 Textile Designers and Auto Ethnography

Auto ethnography is a method that is growing in use amongst textile researchers, as they feel an urge to try to write about the things that often they do and make instinctively, in order to better understand its value and potential cultural impact.

I decided to conduct a review of the process of establishing the UrC itself and key projects within this timeframe as it seemed to me that both the *process* of reflecting and writing about the experience, and the text I produced with the model I could create from it, would be original and of value to others. ‘A researcher uses tenets of autobiography and ethnography to do and write auto ethnography. Thus, as a method, auto ethnography is both process and product.’ (Bochner & Ellis 1992).

The call for textile designers and researchers to become more vocal and engaged (Heeley & Press 1997) has been one to which I responded throughout my career, but with the response previously being primarily through action rather than written reflection. Provocation through the creation of new artefacts for exhibition formed the basis of methods for most of my previous research outcomes, but during the 5-year period of leading the UrC new knowledge was generated through the writing of strategy documents required by the host University. In other words, the annual reports and funded project report requirements enabled me as a practice-based researcher to find ways to generate new knowledge.

Workshops, with invited external speakers and coaches, provided me and the other researchers at the UrC with new methods and skills. I wrote, and gave keynote talks at conferences, about the value of these new communication, management and facilitation skills for textile design practice and the field of sustainability and research (██████ *et al* 2016; ██████ 2014). These outputs required methods of reviewing the knowledge that had been created, and understanding how this had supported the participants. This was done through surveys, informal interviews and discussion sessions. Yet to enable me to go deeper in to this particular period of growth and development as a leader, a new method was needed. It was not enough for me to just write thoughts and reflections down. It needed to be a process that was deep, thorough and rigorous, and result in something usable, like a transferrable model.

In writing about design and research decisions and textiles made previously, and the shifting of boundaries that happened as a result, it brought me ‘...closer to the truth of lived experience and more scientifically valid than more detached and seemingly more objective methods.’ (from Goett’s *Materials, Memories and Metaphors: The Textile Self Re/collected*, in Jefferies, Wood Conroy, Clark 2016:125). Auto ethnography is, quote, ‘an approach to research and writing that seeks to describe and systematically analyze (*graphy*) personal experience (*auto*) in order to understand cultural experience (*ethno*).’ (Ellis, Adams & Bochner 2011). At its best, it ‘acknowledges and values a researcher’s relationships with others’ and ‘uses deep and careful self-reflection’ (Adams, Holman Jones & Ellis 2015:2) to bring new knowledge to the fore.

As a research method it is often critiqued (for its perceived lack of scientific value), but it also is becoming known for its value to humanities research, where the researcher is a commentator on a situation for which they have no first-hand experience. If the researcher can get past the accusation of ‘narcissism’ and ‘dullness’ they can find the telling of their own stories really useful and effective, particularly with research which aims to have a cultural impact (Campbell 2017).

3.2 Designing the Study

The four elements of the study were created in sequence, beginning with the HEFCE report being published in 2015, followed by the author’s interest in reviewing the UrC work (in order to propose a new UrC with a focus on circular design).

- I. HEFEC Report (2015)
- II. Baron’s Signposts and the UrC Workshop (July 2016)
- III. Author’s auto ethnographic process (August 2016):
 - Writing #1 – author wrote lengthy notes after the workshop
 - Discussion –a Skype discussion between the author and Baron created the questions for the study
 - Writing #2 – author wrote reflective text, using the questions to structure and guide the writing
 - Response – Baron wrote responses to author’s writing
- IV. Analysis & Modelling (September – November 2017)

The workshop at the UrC with Ayelet Baron in July 2016 (Figure 3) introduced the seven signposts to the researchers, enabling them to apply the thinking to their own individual design approach whilst aiming to create a shared vision for the UrC. One task asked the participants: What is my purpose? What makes my heart beat? Many answered in terms of making a contribution to the field of design and sustainability: *Creating change using the power of design; Reflection to create philosophical direction; To constantly question and reframe the problems we are trying to solve in the Centre; Progressive change for people and planet*. Some participants also answered in terms of the group, recognising that their purpose was: *To make a positive contribution to helping others to achieve a common goal; Understanding how things work so that I can help enable change towards a 'happier' future for all; To contribute to my community (...)*.

Both sets of answers were of interest to me, demonstrating that the UrC researchers were both focused on the sustainable design agenda for textiles, as well as expressing an understanding and desire to participate in a community, the UrC.

One month later, through Skype calls, I drew up seven questions with Baron's help, which aligned my experiences with her seven signposts. I then used these to reflect on my experiences of both building the UrC and leading funded design research projects. The 10,000-word text I wrote was used to draw out a series of insights and observations. These were then placed into a full-length working table format that was created to enable analysis through triangulation with aspects of the HEFCE model, and finally, the new models.

3.3 Analysis and Modeling

The triangulation metaphor used in research originates from navigation at sea, land surveying, and construction and in research has become a powerful technique that facilitates validation of data through cross verification from two or more sources. 'In particular, it refers to the application and combination of several research methods in the study of the same phenomenon'. (Patton, 1999). Triangulation was used in this study not to test for consistency, but to find points of connection and correlation between three sources and methods, in order to structure and strengthen the insights and ideas from the reflective writing process.

The modeling process – revising the HEFCE model – required me to revert to a sketchbook for a period of working alone in the studio, considering what the insights meant in terms of shape and form, and using a pencil to redraw the model time and time again, before taking the final sketches in to Photoshop to create a graphic version. This return to a practice-based technique was familiar and reassuring, and it also felt inevitable and essential. My leadership supports the practice of members of the UrC, and the results of this study show how important maintaining and building my own practice work is, for them and for myself. This became key to the sense of *wholeness*, as the results discussed below show.

4 Results

Table 1 shows Baron’s signposts mapped against aspects of the HEFCE model, and the original questions that were created for the study.

The HEFCE characteristics were used to form four areas for discussion in this article: people, culture & values; community and network; and strategy, funding and institutional/departmental practices. Baron’s seven signposts formed four themes for this study which correlate with the four areas from the HEFCE model: Creating and Leading an Inclusive Centre and Being Whole Within it; Developing a Shared Purpose, which includes Working at Living; Co-creating Communities and Finding New Ways of Working.

4.1 People

Baron’s signposts that were applied here were *Conscious Leadership, Integrating the Team & Becoming Whole*. When considering questions for the HEFCE circle of ‘People’ the idea of the leader as a person, and leadership as an agreement and relationship between people, came to the fore. Unlike the HEFCE model, where leadership was separate to people, and less central, Baron’s signposts encourage leaders to be the most ‘whole’ person possible – supporting others and the self to achieve the best results. The questions developed from this part of the study were:

Q1. How can I lead this Centre, meeting all the objectives I have been set?

Q2. How can I make sure all members get involved in the Centre and projects?

Q3. How can I become a whole self when I am so many different things to so many different people here?

4.1.1 *Creating and Leading an Inclusive Centre and Being Whole Within it.* The answers to these questions reveal certain things that are of paramount importance for the leader to establish at the outset of the role. These include setting one's own objectives and building one's own team if possible, rather than inheriting these. The business plan must be authored by the leader in order to enable commitment to a vision. The team and membership should avoid being too big, with too many conflicting interests, and too many managers. Integration is an ongoing process – making sure that all people feel included in the UrC's vision, and able to participate as fully as possible.

The leader should aim to surround themselves with people they want to work with and ensure they are properly resourced. Aim to create opportunities for others, above yourself, as a leader – looking for projects that will bring out the strengths of the team. But – key to success – is that the leader also IS the researcher they want to support. 'As Director, you need to lead by example. Make the time to be a researcher – don't just manage others. Create a work and time plan, based on realistic objectives – that ring-fences time to write. And make sure your team know how important it is for you to be absent to do this.'

In order to achieve the above, in particular the last point - it's important to know when to bring in the managers. 'If new ventures mean more time and commitment, and new knowledge levels or greater degrees of administration, identify the limits of the team and work towards getting in extra support.' Learn to delegate well, as spreading the load and knowing when it's time to ask a team member to take on more responsibility is part of delivering a vision for all the people in the UrC.

The vision of the UrC should include developing projects with open briefs to support broad participation by members – researchers of all levels should be able to contribute – and the participants should develop practices where group reflection and knowledge exchange is a regular occurrence. This way of working improves many aspects of an UrC by making the people in it feel supported, heard and understood, but also serves the group well when difficult situations arise. The leader needs to set an example through how they communicate, to encourage the members to see communication between people as

essential to good research practice.

In order to support the members of an UrC in becoming better researchers the leader needs to ensure that coaching, mentoring and training are regularly delivered and reviewed as part of the appraisal process. Personal growth and development are key to original research – for the members as well as the leader. ‘Learn new things together. As a leader, as you learn, so you can share.’ Becoming whole is about being your best self – inside and outside of work – and not separating too much the way that you present yourself in these contexts. Progressive leadership in industry is about being ‘authentic’. From the experience of the author, this particular approach proved to be the most successful in enabling the UrC to recruit good people and retain them, which HEFCE recognize as key to high performing units (2016:6).

Finally, the last insight is about developing a sense of limits or boundaries to *other people* who make demands of the leader. It became clear through the reflection process that “growing a thicker skin” was important to being able to counter certain pressures arising from people both within and without the UrC. “You can’t please all the people all the time”. Finding a balanced view on what can be done for oneself and for others will enable a leader to sustain a role, whilst also developing vision and ambition within the membership.

4.2 Culture and values

Baron’s signposts that apply here are *Creating a Shared Purpose & LIFEworking*. When considering questions about culture and values, the following questions were developed:

Q4. How can I develop a shared purpose for the Centre and its members?

Q5. How can I work at living, rather than live to work; and how can this become a healthy way for my research team to work too?

4.2.1 *Developing a Shared Purpose, which includes Working at Living*. What emerged through these questions was that a desirable internal culture – especially when exploring circular economy ideas – was a highly collaborative one, and that every collaboration should be seen as an outcome in its own right. “*Collaboration means making time to bring people together to co-create a shared purpose.*” It was felt to be important to work out the details of collaboration upfront. “*Don’t work it out as you go along – sit down and*

talk through the potential outcomes and ownership issues, as well as the methods and processes. Find the foggy bits, and note them.”

When it was not possible to work this way – members had different approaches and could not collaborate easily on ideas – a much more disjointed and less comprehensive set of results were presented at the end of projects. In some cases, members left the UrC to set up their own hubs or groups; and whilst this is not necessarily a negative outcome, building and growing an UrC that is ‘high-performing’ would not be possible if members did not ascribe to the culture and values that exist at the heart of the organization.

Democratic decision making and systemic development in an academic context is important to trust and collaboration efforts. *“Academic research loves to hold up its high-achievers, its philosophers, its award-winners. But these individuals are becoming rarer as the environment changes. Embrace diversity and enable progression across the board. And if the academic system seems outdated, challenge it to change.”* Research leaders need to make fairness, equality, accessibility and generosity central to the group’s collaboration ethos.

The reflective texts revealed that spending time together as a team was important to how the culture and values developed at the UrC. Eating meals together – at work, on trips, and for social events helped researchers to debrief and ‘digest’ the activities and ideas. The informality of these events built an understanding for all that was hard to capture through other feedback routes. *“Formal feedback mechanisms rarely capture the human interactions.”* Likewise, working together outside of the physical office space was beneficial, as *“we connect differently in different spaces – and by being connected we are more resilient.”*

In terms of resilience, the culture and values need to seek to sustain researchers as well as project outcomes, aiming to *“Look after each other. Know what each individual needs – what makes them happiest and what will make them flourish. Support their efforts.”* The notion of liking and enjoying your work sounds obvious, but if practice-based researchers only produce written outcomes like journal articles, their unique offer to the field is at risk when it needn’t be, *“...our field of practice-based textiles research we have the flexibility of defining it for ourselves.”* The culture needs to support a range of

practices and approaches, and the leader can find ways to ensure time and work load planning takes into account creative, hands-on action.

Finally, stress can negatively affect a culture and it was found to be something that needs to be openly discussed and addressed, and even monitored. Whilst insights like these fall into the category of *Human Resources* at an organization, and many measures are provided to support researchers centrally, an UrC culture can also enable a healthy balance for its members, which in turn enables strong levels collaboration, trust, knowledge exchange, generosity, understanding and creativity to be maintained.

4.3 Collaboration and networks

Baron's signpost that was most relevant for the author here was *Co-Creating Communities*. The internal collaborations seen above will naturally foster external collaborations which lead to more developed networks. Baron sees these as "trusted communities and unlikely partnerships". (2016:XX) For the author, the UrC had a large membership served by people that were all well connected, so this question was less about building these communities from scratch, and more about being selective with time, energy and resources. *Q6. Who do we want to work with and why?*

4.3.1 *Co-creating Communities*. Through the reflective process the author realised that the first step in this process was to enable the people in the UrC "*be conscious of the need for community*". For academic researchers an UrC can often feel like enough of a community in its own right – isolated study being the basis of traditional academic pursuits – but external networks and communities are the lifeblood of research connected to the circular economy, as the ideas are most often applied and needing context. Also, all major funding calls require a great degree of cross-sectoral collaboration and these most often come from trusted communities and networks that have taken time to develop. The reflective texts also highlighted the need to "*understand the community through the local and global lens.*"

It was vital that the UrC and its members were properly represented online and fully visible. Clear and evidenced statements supported by links to strong research outcomes would mean that the community and network could then self-select. "*Be abundantly online. Don't worry about over-sharing online. Ideas are just ideas; actions actually*

make things real. By building your audience you will receive feedback, support and new approaches.” This can also mean changing the language – shifting it away from an academic style to a more generalist audience. This is hard for a group of people to do and needs strong leadership, creative direction, and lots of consultation. *“Communicate your success. Traditionally research under-sells itself. It doesn’t seek a broad audience, for fear of devaluation. It’s important to show yourselves and the world what you are doing and bring them with you on your journey.”* Ask researchers to be accountable for communicating the work of the UrC as well as their own ideas, in both formal and informal contexts. *“The team need to understand milestones and work openly towards them – presenting them brings new insight and feedback during the project process, rather than just at the end.”*

What became most interesting about this part of the study was that when some of the community became real – not online but in the room – what had been previously regarded as different communities quite easily became one. The sense of potential for sharing ideas and approaches was greatly increased in situation where co-creation took place. *“Find ways to connect up the different community groups. Explore the potential of bringing groups together to create new synergies, ideas and maybe projects.”* This highlighted the need for developing both online and offline communities in quite different ways, for the way in which they benefit the research – as well as the research benefitting them – is changing through real time interaction with the ideas.

4.4 Strategy, funding, institutional and departmental practices

These attributes are presented in the HEFCE model as desired, but not a pre-requisite, for high performing research centres. In many ways reflections on these aspects could form their own study, as practice-based design research is lacking in useful guidance in this area. For this article, the author focused here on one question, framed by Baron’s signpost *Finding New Ways of Being: Q7. How can I work differently to support the diverse interests of group?*

4.4.1 *Finding New Ways of Working.* Up to this point in the study the subject of funding and finances had not been expanded upon, yet as most researchers working today will recognise, the opportunity to lead may only come through a project with funding attached. Financial resources underpin performance levels in the UrC, as it buys time to explore

and develop new ideas that can evolve into bigger projects. Whilst staff on teaching contracts may produce research outcomes, the time dedicated to teaching duties often puts such enormous pressure on them that unless funding is available to buy-out teaching hours, the time commitment to a research unit is very limited. Finding funding to support staff is a critical part of the leadership role, and can be approached through a strategy that builds a range of projects directed at different levels of research outcomes and activities.

Traditional sources of funding will support communities and networks – at local and international levels (AHRC) – as well as larger community projects (AHRC). Non-traditional sources – like industry partners and independent organisations – can support research that is designed to take new forms, such as Mistra Future Fashion and ‘design researchers in residence’ in companies (Filippa K 2017) and scientific organisations (Ribul & de la Motte 2016). Enterprise work - contract research – can also create ‘seed funding’ opportunities; and even the sale of publications and tools through online stores can enable UrC’s to independently generate income. Centre leaders need to evolve multi-level strategies to attract funding to grow the productivity of its membership.

Finding ways to develop and implement a strategy will often involve meetings – and finding a way to make the most of the many meetings leaders have is key. Meetings can be anything from 1:1 conversations to full committees with agendas – but each one needs to have a clear purpose. The advice from the study was clear – meetings are time consuming but they enable progress: *“if used well, they can provide ‘boosters’ or footholds; they can give you the next step up.”* The study also recommended that a leadership strategy should include making aspects of the role recognisable and consistent. *“Establish a series of recognisable leadership tasks for yourself. This creates physical signals to your team about how you are leading.”*

New ways of working in a young field like academic design research may mean that assumptions need examining before proceeding with projects and activities, to ameliorate against cross-sectoral misunderstandings. *“Art Schools are not like science institutions. Design research projects – especially when practice-based – are very different to most science research projects.”* After this, if questions remain unanswered, it is important to know when external support is needed. *“Bring in the experts... Don’t be afraid of reaching out for help – you will gain the respect of your peers, not lose it.”* Art, design,

science research is dynamic and innovative – that is the appeal – *“but we can’t be expected to know how to do everything in a culture that is constantly changing.”*

Consider a strategy where your team can offer more than just the research outputs – impacts can be a broad variety of things. Despite the economic and performance pressures that an UrC may bring about, part of a strategy should be about creating a team with optimum membership. Too big, and the role of leading becomes difficult as the people in the UrC all need to make identifiable contributions to the shared vision. *“Collaboration has optimum scales – people play a specific range of roles – learn about this and use it internally, and externally.”*

When the team dynamics work well, then the learning curve can be great and can provide ample ‘data’ that can be more rigorously reviewed and shared. These endeavours all provide other design research units with new knowledge. *“Make everything you do data. Your team is an experiment, as the field is so new. You have much to offer other ‘start ups’ in the sector.”* When a team is not working – the leaders’ role is to spot this. *“Not all the pieces fit, all the time. Know when to let go... recognise this and make a new strategy.”*

4.5 Summary of Results

This study has revealed that at the heart of a high-performing research unit, people and leadership could be seen one entity, not two separate ones as the HEFCE model shows. Cultures and values are essential in terms of success, with collaboration and network coming afterwards; as culture and values need to be consistent and reliable, whilst collaboration and networks can be flexible and ever-changing. Strategy, funding and institutional and departmental practices provide leaders with new ways of working to support the core focus - people, culture, values - through collaborations and networks.

Significantly, the study highlighted to the author the fact that leaders are people, and that progressive leadership is so much about co-creation and collaboration that individuals working in the UrC must form one whole entity – the centrifugal force of the UrC – with many of them ultimately growing into leaders themselves.

5 Whole Circles

5.1 *The Grounded Model*

The first revised model, The Grounded Model (Figure 4), which resulted from the study and discussion, fuses ‘People’ and ‘Leadership’ in to one entity. In this revised model people and leaders are together, and they weight the model – they ground it. In this way, the diverse interests of the group are embraced and the model can evolve outwards in new directions from a stable base.

‘The 21st century leader believes that they serve a greater purpose and that they are contributing to the greater good in business and life. They are moving away from the false belief that you are two separate people, your professional self (work), and your personal self (life). There is only one person, and one flow of life, which happens to include working... They connect with people at a core level, and understand the importance of trust and relationships in every part of their life.’
(Baron 2016:73)

5.2 *The Whole Circles Model*

The HEFCE model was further revised to enable the people at the UrC to evolve their own leadership opportunities – their own cohort of researchers with their own particular take on culture and values that still relate to the UrC. These emerging researchers may then need to develop their own collaborations and networks, and evolve their own circles. This is of course already recognised in industry as good leadership practice – to cascade, to grow, to nurture others to lead.

Figure 5 shows how leadership in the circular economy might take the form of *Whole Circles*. The two-dimensional model has evolved into a three-dimensional model as researchers in the UrC progress into the leaders of their own areas of specific expertise – interests and activities remain connected but diversification and growth is enabled - making the UrC not larger, but more rounded, more globe-like, more aligned with the earth.

In noticing that the nurturing of the growth in impact and reach of other researchers, the author understood that the *wholeness* came not only from connecting leadership and people in the UrC, giving a stable base to work from; but that the wholeness came from an additional dimension. The more the other researchers developed in all areas, the more

complete and solid the shape became. The idea of wholeness, of being holistic, is not just a tenet for the leader of the UrC, but is a valuable approach for all the researchers to consider; leading them not away from the UrC as they evolve and grow, but making it more complete whilst still becoming a leader in their own right.

The leader of the UrC, then, is a curator of many leadership efforts. The factor that links of all these efforts is creative practice. The auto ethnographic study revealed the importance for everyone of pursuing practice-led research; and if the leaders of the UrC prioritise it, then the members will too. This emphasis on practice and leadership, on a holistic and whole approach, is key to progressing circular textile design.

In the final stage of the email feedback sequence between Baron and the author, Baron wrote: ‘For many people, taking a holistic approach is challenging because it forces us to examine long-held beliefs. For example, we are used to trying to easily find a single right answer and a short-term solution to address very complex problems. Becoming whole means that we seek opportunities that take into account perspectives that bring us together by showing the whole spectrum of possibilities at our disposal—like scarcity and abundance, efficiency and resilience.’

6 Conclusion

This article attempts to highlight the importance of using the academic space for telling the stories of our research experiences; so that design research leadership can make a vital contribution to addressing the complex challenges of the emerging circular economies and cultures, and more broadly too, in the places where art and science meet and new ways to communicate are needed. Writing about an experience to share with an audience can in itself be seen as a form of leadership as well as producing new knowledge.

These are people-centric challenges – including the negotiation of designers collaborating with scientists towards technical outcomes – and need people-centric styles of leadership. The great potential here is for the next generation of textile designers to emerge as progressive and *whole* leaders, drawing on the discipline’s rich past and the strong female roles that have emerged to date. Too many textile design stories have gone untold already as the discipline has been over-shadowed by fashion and product design statements. Tim

Ingold encourages us to see our current stories as an integral part of the past and future of the field, writing about the relationship between personal narrative and making textiles,

‘.... retracing a path through the world that others, recursively picking up the threads of past lives, can follow in the process of spinning out their own. But rather, as in looping or knitting, the thread being spun now and the thread being picked up from the past are both of the same yarn. There is no point at which the story ends and life begins.’ (Ingold 2007:90, as cited in Jefferies, Wood Conroy, Clark 2016:97)

We need many new models to support the experiences of leading, as well as the telling of leadership stories, by practicing textile designers, to give confidence to individual pursuits and collaborations where the path breaks from tradition, as we work together towards new, circular textile solutions.

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Figure Captions

Figure 1. HEFCE model (2015)

Figure 2. Baron's 7 signposts (Baron 2016)

Figure 3. Baron's workshop with researchers at the UrC (July 2016)

Figure 4: The *Grounded Model* (██████ 2017)

Figure 5: The *Whole Circles Model* (██████ 2017)

Table Caption

Table 1: Triangulation framework for the study.