

Building model trains and planes : an autoethnographic investigation of a human occupation.

POLLARD, Nicholas <<http://orcid.org/0000-0003-1995-6902>> and CARVER, Neil

Available from Sheffield Hallam University Research Archive (SHURA) at:

<http://shura.shu.ac.uk/11584/>

This document is the author deposited version. You are advised to consult the publisher's version if you wish to cite from it.

Published version

POLLARD, Nicholas and CARVER, Neil (2016). Building model trains and planes : an autoethnographic investigation of a human occupation. *Journal of Occupational Science*, 23 (2), 168-180.

Copyright and re-use policy

See <http://shura.shu.ac.uk/information.html>



Building model trains and planes: An autoethnographic investigation of a human occupation.

Journal:	<i>Journal of Occupational Science</i>
Manuscript ID	ROCC-2015-0019.R3
Manuscript Type:	Feature (research and review)
Keywords:	human occupation, model building, modelling, hobbies, leisure

SCHOLARONE™
Manuscripts

View Only

1
2
3 Building model trains and planes: An autoethnographic investigation of a human
4
5 occupation.
6
7

8 Key words: human occupation; model building; modelling; hobbies; leisure
9
10

11
12
13 Modelling appears to be a largely uninvestigated human occupation (Pollard &
14 Carver, 2012) which has begun to arouse interest in a range of disciplines, for
15 example in cultural history (King, 1996), geography (Yarwood & Shaw, 2010) and
16 social history (Harrington, 2012). King's exploration (1996) suggests that model
17 making is ubiquitous through human society, in evidence as an occupation since
18 prehistoric times. He described it as "constructing, collecting and operating tiny
19 models of larger prototypes ... generally but not always smaller and usually of
20 materials different to those of the original" (p. 3). In modelling a prototype is the
21 original object being modelled. The term 'model making' refers to different activities
22 including building without plans from raw materials ('scratch-building') through to the
23 assembly and modification of mass-produced kits using individual scratch-built parts
24 made from recycled, junk or preformed items (King, 1996). King (1996) suggested
25 that model-making is a craft based leisure occupation, using varied tools and
26 materials in periods of spare time. Model making may commonly include
27 representing everything from vehicles to historical figures, from individual buildings to
28 complete landscapes, using a wide variety of materials.
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50

51 Although ubiquitous the nature of modelling has changed over time. Notably the
52 technologies which facilitated the injection moulding of plastics enabled a mid-20th
53 century boom in the affordability and availability of kit models (Pollard & Carver,
54 2012). In 2013, a key model manufacturer, Hornby PLC, reported a turnover of
55
56
57
58
59
60

1
2
3 £43.135m in the UK alone. Although models are available in a variety of scales, the
4
5 most common were 1/72nd scale for aircraft and 1/76th and 1/87th (referred to as
6
7 OO/HO as both run on the same track gauge) for trains. This means that most such
8
9 models are under a foot (or 30cms) in length, a size which can be accommodated in
10
11 most domestic spaces. Although there are well documented exceptions, it is
12
13 generally asserted that most such model making is performed by men (Pollard &
14
15 Carver, 2012). Our study provides an insider perspective on this form of modelling.
16
17 More specifically it focuses on the building of static scale aircraft (as opposed to, for
18
19 example, cars or flying model aircraft) and the construction of working model trains
20
21 and their layout (as opposed to static models of trains).
22
23
24
25
26

27 Model making corresponds to Riley's (2011, p. 323) account of craft as an
28
29 occupational form through construction and "bodily interaction" with materials, and
30
31 her account of doing as an occupational performance. Nelson (1988, p. 633)
32
33 described occupational form as having an objective set of physical and sociocultural
34
35 characteristics which are "independent of the individual who is engaged in the
36
37 occupation". The occupational form in this form of modelling arises from such pre-
38
39 determined structures as preformed kits or the choice of particular materials which
40
41 define its performance, as for example has been identified in occupations such as
42
43 textile making (Nelson & Jepson-Thomas, 2003; Riley, 2011). In addition our
44
45 exploration of the modelling of aircraft and railways will recognise its historical and
46
47 socioeconomic context (or "domain", Dickie, 2003, p. 121), as well as its meaning to
48
49 modellers. This also reflects the increasing study of occupations concerning their
50
51 broader social contexts rather than as individual activities, in which their purpose,
52
53
54
55
56
57
58
59
60

1
2
3 meaning and goals are located in particular times, cultures and places (Dickie 2003;
4
5 Dickie, Cutchin & Humphry, 2006; Hocking, 2008a; 2008b; Riley, 2008).
6
7

8
9
10 Authors such as Suto (1998), Howell and Pierce (2000) and Horghagen, Josephsson
11
12 and Alsaker (2007) have described a significant history of interest within both
13
14 occupational science and occupational therapy concerning hobbies and craft based
15
16 leisure occupations. Crafts are important aspects of individual and cultural
17
18 expression in changing economies (Dickie & Frank, 1996), even where makers are
19
20 following kit instructions (Pöllänen, 2015). Some craft hobbies and activities, such as
21
22 quilting (Dickie, 2003; Howell & Pierce, 2000; Riley, 2008, 2011; Riley, Corkhill, &
23
24 Morris, 2013), have enjoyed a particular focus in this literature.
25
26

27
28
29 This study of model making may be significant because there appears to be a
30
31 greater engagement in leisure pursuits than ever before. Within the UK alone, adults
32
33 doubled their spending on leisure between 1976 and 2002, when it became the
34
35 largest area of household expenditure. This disposable income is spent on the
36
37 products of a considerable leisure industry catering to a plethora of specialist
38
39 interests including modelling (Office of National Statistics, 2012; Pollard & Carver,
40
41 2012).
42
43

44
45
46
47 Baby boomers, those belonging to "the unusual demographic blip of babies born ...
48
49 between 1945 and 1965" (Harkin & Huber, 2004, p.11) in particular have returned to
50
51 products and pursuits from their youth, which Harkin and Huber (2004, p. 37)
52
53 described as "down-ageing". Lauwert (2008, p. 233) noted a phenomenon of these
54
55 "adults staying younger longer". This group is collectively both in possession of the
56
57
58
59
60

1
2
3 disposable income and time necessary to facilitate these interests, both important
4
5 factors in the economy of leisure occupations (Huang & Shi, 2015).
6
7

8
9
10 In addition there is increased recognition that wellbeing and identity can be
11
12 expressed through diverse leisure activities and hobbies as much as through other
13
14 occupations (Caldwell, 2005). This applies whether they are socially organised in
15
16 craft guilds and networks (Riley, 2008, Pöllänen, 2015) or, like fishing, participated in
17
18 by solitary individuals (Bull, 2009). There is also a growing discourse around the
19
20 value of leisure within healthcare in general (e.g. Royal College of Psychiatrists,
21
22 2010; Clatworthy, Hinds, & Camic, 2013) and occupational therapy (Suto, 1998;
23
24 Pollard & Carver, 2012). Wellbeing studies of quilting (Burt & Atkinson, 2012)
25
26 and women textile craft makers (Pöllänen, 2015) draw extensively on occupational
27
28 science and therapy sources. Although Caldwell (2005) has recognised that the
29
30 mechanisms through which leisure is therapeutic have not yet been fully addressed,
31
32 there is agreement that it can have benefits for "physical, social, emotional and
33
34 cognitive health" (p. 15).
35
36
37
38
39

40
41 Modelling has not featured in these discussions. The research literature on modelling
42
43 is sparse. One exception is King's (1996) study of model making in general, which
44
45 includes some casual interviews with model makers. More recently, Yarwood and
46
47 Shaw's (2010) investigation used 22 semi-structured interviews with railway
48
49 modellers (i.e. people who specifically model railways) in an 'attempt' "to listen to the
50
51 stories that railway modellers tell..." (p. 431). There is no parallel study of the
52
53 building of static model aircraft.
54
55
56
57
58
59
60

1
2
3 Most of the existing literature on building models is produced by the modelling
4
5 community itself (e.g. Pearson, 2007, Stanton, 2002). It is primarily concerned with
6
7 modelling techniques and mainly consists of 'how to' guides, but there is also an
8
9 emerging genre of nostalgic literature describing iconic models and manufacturers
10
11 such as, in the UK, Airfix™ and Hornby™ (e.g. Ward, 1999; 2004; 2009). This
12
13 literature in itself may be said to represent some of the preoccupations of the baby
14
15 boom generation.
16
17
18
19

20 21 **Aims**

22
23 This research responds to Dickie's (2003) call to, "first to describe the occupation,
24
25 and second to attempt to understand the process, outcomes, and experience of the
26
27 occupation" (p.120), in this case the adult hobby of building models. This study
28
29 begins to address the lack of empirical work on modelling as a human occupation.
30
31 The broad aim was to explore the experience of modelling as a purposeful,
32
33 meaningful and health giving occupation from the perspective of the modeller as an
34
35 adult. However, we acknowledge that any discussion of models must also recognise
36
37 that this practice may begin in childhood (King, 1996; Pollard & Carver, 2012). A
38
39 secondary aim, therefore, was to explore our recollections of childhood modelling.
40
41 Following other studies (e.g. Riley et al., 2013), we wished to both explore the
42
43 process of production (in this case, modelling as an occupational form) and the
44
45 meaning of the product itself (in this case, the model an outcome of occupational
46
47 performance).
48
49
50
51
52
53
54

55 56 **Method**

1
2
3 Given our aims and interests we selected an autoethnographic approach which is a
4
5 pragmatic and convenient qualitative method that enables researchers to critically
6
7 explore their own experiences (Muncey, 2010). Methodologies that contain both
8
9 personal and academic elements, such as auto-ethnography, are of increasing
10
11 interest in the field of qualitative research (Burnier, 2006). This approach is not
12
13 without its critics, and there is recognition that some have found it difficult to accept
14
15 as a credible research method (Foster, McAllister, & O'Brien, 2006). This is partly
16
17 because of its embrace of subjectivity. To be effective, auto-ethnography requires a
18
19 disciplined and rigorous approach to produce a narrative which is meaningful to
20
21 others, rather than merely for oneself. Here rigour and discipline entail transparency
22
23 and clarity with regard to the subjective elements of this approach and the particular
24
25 nature of individual narratives (Ellis, Adams, & Bochner, 2011). Lapadat (2009, p.
26
27 967) described an approach to autoethnography, which she termed "collaborative
28
29 autobiography", involving several authors interpreting both their own and others'
30
31 accounts. In this case the two authors were the sole participants.
32
33
34
35
36

37 Collaborative autobiographies allow the researchers to retain their separate identities
38
39 (Lapadat, 2009). Given the differences and similarities in our backgrounds, we felt
40
41 that this approach would best suit our purpose. In addition we felt that the following
42
43 biographical factors enabled us to produce authentic accounts of our modelling:
44
45 Firstly, both of us were actively engaged in modelling (one with an interest in planes
46
47 and the other in trains). Secondly our initial discussions showed that as children we
48
49 had both engaged in model making. Thirdly, we are both baby boomers who began
50
51 modelling in late 1960s Britain as children and, now in our 50s, had the income and
52
53 the time to engage in this leisure form. Finally, our backgrounds in mental health
54
55 settings, Neil as a nurse and Nick as an occupational therapist, and in research have
56
57
58
59
60

necessitated reflexivity in both writing and interpersonal contexts and "make visible the beliefs and values" present in our narratives (Foster et al., 2006, p, 46).

Within collaborative autobiography there can be an emphasis on the deeper understanding of self as a goal in itself (Lapadat, 2009; Lapadat et al., 2010). For us, this personal understanding was secondary to our goal of investigating modelling as a human occupation per se. The following is an account of our investigative process.

Step 1

We agreed we would each would keep a diary for a 6 month period from a given start date, to keep the study within a reasonable time frame. The diary was to contain free text concerning current modelling experiences and related reminiscences. We were free to make diary entries when we felt fit.

Step 2

Each of us read each other's diary. We also checked our shared understanding of the content and isolated significant themes.

Step 3

These themes were then subjected to "interpretive discussion" (Lapadat, 2009, p. 969) and when agreement was reached were grouped and 'collapsed' into what we felt to be the most significant major themes. Throughout steps 1-3 we were continually engaged in a "recursive dialogue" (Lapadat, 2009, p. 958), discussing our own and each other's experiences. We also continued to read and share literature related to model making.

Ethics

Discussion with a representative of the university ethics committee suggested that we did not need to gain formal ethical approval, because we both consented to share our data. It is worth noting however that there can be ethical concerns in such autobiographical work, for example the lack of anonymity of the researcher subjects (e.g. Lapadat et al., 2010) and what we might reveal about other people in our personal lives (Freadman, 2004). Although we felt that there was little of contention in our disclosures, we continually monitored them and did not identify any concerns.

Findings

Each of our diaries ran to over 90,000 words. The following sections summarise our findings under major themes, the first of which corresponds to occupational domain issues, while the remainder combine aspects of occupational performance and occupational form. We have used the collective first pronoun to refer to shared findings, and our own names to identify individual experiences.

Socialisation

We both described early childhood interests in trains (Nick) and aeroplanes (Neil) and recollect that at the time (in the 1960s) our parents, particularly our fathers, took us to preserved or 'heritage' railways, airshows, or air and railway museums. In addition, some of Nick's relatives had worked in the railway industry and shared their experiences with him. We actually began building models in the years approaching our teens. In both accounts of building models in our childhoods our fathers featured significantly and the positive encouragement from them seems to have reinforced our engagement in the occupation.

1
2
3 For Neil, the modelling of aeroplanes eventually became a significant aspect of
4 relating to his father and became a shared indulgence. As an adult this afforded Neil
5 a means of maintaining their male relationship in an almost completely female family,
6
7
8
9
10 even beyond his father's death:

11
12 Dad built for me, we built together, he and I built a little on our own, I built for
13
14 him and now I have begun to build just for me ... the activity connects me
15
16
17 with my youth and warm memories of parents (particularly dad).
18
19

20 Nick tried to share his adult enjoyment of modelling with his son and daughters,
21
22 although his son took more active interest. Neil had no sons but never thought to
23
24 involve either of his daughters in building models.
25
26

27 Neither of us built models from scratch; those that we described making were
28
29 commercially available kits. Neil's father however did have skills in both scratch
30
31 building and the construction of solid scale wooden planes, hand carved from
32
33 nothing more than a plan. Neil remembered being encouraged to try and work with
34
35 wood but never took it up and looked to his father for help in making plastic kits.
36
37
38 Looking at the surviving results of these modelling forays, Neil recognised that his
39
40 father actually had few skills in working with plastic, which for him would have been a
41
42 new medium.
43
44

45 46 *Modelling choices* 47

48
49 Our diaries showed that whether as children or as adults we preferred to model a
50
51 particular subject, i.e. aeroplanes or trains, rather than taking an interest in the
52
53 *process* of modelling per se. In addition we were attracted to the models of specific
54
55 prototypes that we simply liked e.g. the Hawker Hurricane or English Electric Deltic
56
57
58
59
60

1
2
3 Diesel. While we both recognised that as adults we could have purchased finely
4 detailed ready-made models of these subjects, Neil described preferring to build a kit
5 instead because it involved elements of self-expression. As he said: "there is
6 something about being able to say: I built that, even if everyone else has built it in
7 the same way."
8
9

10
11
12 Our findings suggest that our simple attraction to a particular model was not defined
13 by conventional aesthetics. For example Neil recognised that the shape of the
14 Second World War Spitfire fighter aircraft was commonly perceived as beautiful but,
15 like Nick, described an attraction to less obviously appealing prototypes, e.g. "insect
16 like" reconnaissance aeroplanes with their complex observation windows and aerials,
17 models with bright or eccentric paint schemes, or those of unconventional, even
18 'ugly' appearance e.g. the Westland Wyvern aircraft. We both acquired certain
19 models because of their 'fit' with others we had already constructed, while other kits
20 were acquired because of the iconic status and the historical and social connotations
21 of the prototype (such as the Concorde airliner).
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37

38 Our diaries also show that our motivations and choices in modelling changed over
39 time. At first we were bought model kits chosen by adults as presents, even at an
40 age where we had minimal modelling abilities (around 7 years). When we were older
41 (at around 10 years), we were able to exercise our own choices within the limits of
42 our pocket money. At that time we were considered old enough to "go into town to
43 the model shop" independently.
44
45
46
47
48
49
50

51
52 By mid-adolescence (15-16 years) both of us had almost totally abandoned
53 modelling. As a child Nick thought that modelling was a 'grown-up' activity, but as an
54 adolescent he felt that modelling was disparaged by his peers: "What adult person
55
56
57
58
59
60

1
2
3 lines his living room with model aircraft?" For Neil his growing political awareness as
4
5 an adolescent and exposure to televised news of the Vietnam war meant he felt very
6
7 uncomfortable modelling military subjects.
8
9

10
11 Despite these misgivings we both returned to modelling in later adult life, in our
12
13 forties. Neil's main motivation was to re-establish a shared interest with his father but
14
15 he retained an ambivalence regarding military subjects. While Neil encouraged his
16
17 father to choose kits that they both might enjoy together, he now did all the building.
18
19 Nick had wanted the justification to resume his railway interest for some years and
20
21 being able to share building a model railway with his children gave him the
22
23 necessary justification to recommence modelling. For both of us these initial motives
24
25 transmuted into genuine interests in their own right.
26
27

28
29 The findings also showed that both authors modelled simply because they liked it,
30
31 but there were other emotional and psychological benefits. Neil enjoyed
32
33

34 ...the sense of absorption. In a world of build or paint, everything else fades.

35
36 As an individual prone to worry, that is quite an attraction. There is also the
37
38 balance of problem solving and creativity. Instructions can be woefully
39
40 inadequate and patience is required to understand the minimal instructions.
41
42

43
44 For both of us model building provided a sense of accomplishment. As Neil said: "I
45
46 am somehow forced to try and get better, or at least till I can say it's good enough...
47
48 Building models ... has enabled me to take more of a long view - to be patient."
49
50

51
52 Nick also discovered that he enjoyed endlessly "tinkering with" and modifying his
53
54 railway models while building them, more than actually finishing them.
55

56
57 *The modelling process*
58
59
60

1
2
3 This section explores findings about the *processes* involved in the model's
4 construction or its occupational form. Our abilities to build models developed as we
5 got older. Neither of us remembered being dissatisfied with our models at the time,
6 however our recollections are that, as children, our finished kits were at first marred
7 by hasty assembly, resulting in gluey thumbprints and messy paintwork. Clearly
8 some of the kits given to us as children may also have been beyond our skill levels.
9 Both of us still possessed later examples of our adolescent modelling which showed
10 greater finesse in completion. Our accounts of more recent modelling projects
11 revealed a more sophisticated approach, and an overwhelming concern with matters
12 of detail and accuracy. Nevertheless, this always meant accommodating technical
13 compromises to produce 'good enough' models. Our accounts described several
14 models which, when finished, were not exact representations of the actual prototype
15 but were still satisfactory. For example, Nick and his son combined a static plastic kit
16 with a recycled chassis. The resulting locomotive, which they found acceptable,
17 nevertheless rode "slightly too high off the track". This would have been a serious
18 design fault if found in the real engine.

19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39 Some compromises resulted from the fact that, as Neil pointed out, "some scale
40 details are in fact impossible to model at the correct scale. The rigging on early
41 aeroplanes would be virtually invisible if accurately scaled down". Additional
42 compromises derived from limits in our technical ability, the cost of materials and the
43 availability of time. Neil also noted that some model kits included parts for their
44 interior (such as crew seating) which could not be seen once the model was finished.
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
Nonetheless he spent time and energy in completing these details.

Both of us described modifying kits for a variety of reasons. As Neil said, "any
modifications" he would make, however historically inaccurate, would still be

1
2
3 concerned with viewing the plane as representing reality, but hopefully "*more so*".
4
5 Sometimes *extra* details would be added to make the model "come alive", or to
6
7 personalise the model. This included fictitious paint schemes or items such as
8
9 aerals. The construction of the latter could necessitate the use of unusual source
10
11 materials and the process of scratch building some parts. For example Neil
12
13 improvised the rigging for an aircraft aerial using his own hair. While this particular
14
15 technique was advocated by other modellers (Stanton, 2002), both of us sometimes
16
17 invented techniques. For example, Neil decided to make the seatbelts for a model
18
19 aircraft, "from a sample of fabric that was once part of a [real] biplane ... - it just
20
21 seemed to have the right feel."
22
23

24
25
26 One aspect of the modelling process which both authors reported might be
27
28 described as an 'exploratory' phase in the building of any model; between buying a
29
30 new kit and its assembly. This involved experimentally holding the unglued parts
31
32 together to visualise the finished product as if in disbelief that the finished kit would
33
34 actually produce a replica of the prototype. Neil said:

35
36
37 When I try to hold fuselage halves together, well before the point they should
38
39 be glued, it is to see what it will look like. I am always surprised it looks like,
40
41 *almost unbelievably*, a scale model of the plane it represents.
42
43
44
45

46 47 *Perceptions of the model*

48
49 This section explores entries in our diaries concerning our perceptions of models and
50
51 their relationship with the spaces in which they are displayed. Both authors
52
53 remembered that as children they 'played' with their completed models as if they
54
55
56
57
58
59
60

1
2
3 were toys. As they got older, Neil's finished models became simply objects of display
4
5 while Nick had become interested in working railway layouts.
6
7

8
9 As stated in the previous section both authors built kits to be kept, rather than to be
10
11 gifted or sold. Although neither of us describe ourselves as a 'collector', the purchase
12
13 of kits was not random. For example, as Neil said, "a 'collection' has emerged"
14
15 composed of models that he liked and which seemed to follow loose themes (e.g.
16
17 planes in 1930s American paint schemes). As an adult, Neil continued to accumulate
18
19 model kits even when recognising that it would be unlikely they would be built for
20
21 some years.
22
23

24
25 This suggests other aspects of modelling that may actually be more valuable to the
26
27 modeller than finishing a model or realising a larger project such as a railway layout.
28
29 Firstly, even anticipating the building of a kit is a pleasurable occupation. Secondly,
30
31 some experiences in the 'doing' of modelling are equally rewarding. After he returned
32
33 to modelling Nick found himself always "doing a bit more" to a model or "messaging
34
35 about" i.e. running trains and "tinkering" with a never-to-be finished diorama, in which
36
37 problems were more interesting than their completion.
38
39

40
41 As noted we both valued our models not only as accurate representations of their
42
43 prototypes but also as objects in their own right, a thing-in-itself (e.g. a well-
44
45 constructed model). We both described being able to appreciate the prototype
46
47 through the facility of being able to pick up the model and examine it from different
48
49 perspectives. Nick described how, as a child, he attempted to enter the spectacle of
50
51 his model railway by positioning his eye at the same level as the Airfix™ figures and
52
53 toy cars which populated his layout: "I spent a lot of time trying to get an 'OO/HO eye
54
55 view' of the results".
56
57
58
59
60

1
2
3 We both also referred to our models as if they were animated or alive. For Nick this
4
5 was in part because his model trains were powered and therefore moved. For Neil
6
7 the addition of extra details served this purpose, "the bits and bobs, small aerials or
8
9 small transfers are what often make a model *come to life*" (emphasis added).
10

11
12 The findings also show that, when they are displayed, model trains and planes seem
13
14 to occupy a figurative space even bigger than the model itself, i.e. a model train only
15
16 makes sense when displayed on a track. Both of us were drawn to attempting to
17
18 simulate their prototypes' 'natural environment'. Thus Neil's desire as a child was to
19
20 create the illusion of the model aircraft flying by suspending it from fishing line or
21
22 mounting it on a transparent stand. Making Nick's trains appear 'real' necessitated
23
24 building a more complex and complete diorama with additional scenery that gave
25
26 them a context.
27
28

29
30
31 As children, we both displayed our models in our own bedrooms. However, as adults
32
33 with homes and families, the spaces in which we displayed our models were
34
35 negotiated with our partners. Neil's model aircraft occupied a basement and Nick's
36
37 trains the garage loft. These were personal areas which only interested visitors
38
39 would see, rather than communal spaces or places. Finally the size of the available
40
41 space in which to display models has an impact on what is actually modelled. Neil
42
43 never built models greater than 1/48th scale because there was simply nowhere to
44
45 put them.
46
47

48 49 **Discussion**

50 51 52 *The experience of modelling* 53 54 55 56 57 58 59 60

1
2
3 The findings demonstrate some of the dimensions of a significant leisure occupation,
4 the construction of scale models for children and adults in late 20th century Britain.
5

6
7 They detail the modeller's experiential and intimate relationship with the model, both
8 as an object in itself and as a literal representation of the prototype.
9

10
11
12 Modelling can bestow psychological benefits such as enjoyment, relaxation and a
13 sense of absorption, and as such may contribute to personal wellbeing. These
14 findings concur with King (1996) and more recent research on other adult
15 recreational occupations such as quilting (Burt & Atkinson, 2012) or knitting (Riley et
16 al., 2013) which emphasise the role of these occupations in maintaining personal
17 wellbeing. Adult model making appears to have a place in this growing discourse.
18

19
20 For us, though modelling began in childhood and although we were able to give
21 some recollections of our childhood experiences as modellers, these retrospective
22 accounts are insufficient to capture child and adolescent perspectives. Nevertheless
23 from the perspective of occupational domain we appear to be typical modellers, in
24 that we were members of one of the first generations to have regular access to
25 'pocket money' in the 1960s economic boom. It was apparent, at least for us, that
26 modelling was one of the ways in which, as children, we realised increasing personal
27 autonomy and consumer skills. At that time buying and making models were
28 activities which might be said to represent a boy's 'rite of passage', sometimes being
29 temporarily abandoned in adolescence and later resumed in adult life. This trajectory
30 is widely recognised by commentators on modelling e.g. Ward (2004, 2009) and in
31 research findings (Yarwood and Shaw, 2010).
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52

53
54 Over time, our modelling skills developed and it was apparent that we had both
55 acquired a detailed awareness of the behaviour of materials such as plastics and
56
57
58
59
60

1
2
3 also the ability to picture the effect of modifications on the final appearance of the
4
5 model. Throughout the entire modelling process there appears to be a tension
6
7 between the modeller's idea of the prototype and the struggle to achieve it in reality.
8
9 The outcome may be a compromise between desired occupational performance, for
10
11 example, improving on the original model kit to make an enhanced model, and the
12
13 constrictions of occupational form arising from limitations in the design of preformed
14
15 kits, the materials from which they were made, or in their instructions. On the other
16
17 hand, as children, we had been challenged by the difficulty posed to our level of
18
19 ability by some model kits.
20
21
22

23
24 Some of our reported modelling experiences are much more difficult to explain.
25
26 These include the sense of "surprise" that models actually do resemble their
27
28 prototypes, the time and energy spent modelling details that are not visible or
29
30 accessible in the finished model, and the visual appeal of apparently 'ugly' models.
31
32 Baker (1997, p. 33), in a literary essay on the model aeroplane described the
33
34 attraction to modellers of the details sometimes responsible for this ugly appearance:
35
36 the "rivets, knobs, hulls, wires, hinges, visible missiles, sensors, gun blisters - all
37
38 those encrustations that ... make imitation ... difficult enough to be worthwhile". It
39
40 seems here that Baker is suggesting that the attraction of the model is the challenge
41
42 it represents to the builder, though this did not motivate our purchasing choices.
43
44
45

46
47 Another theme, regarding relationships, is more prevalent in relation to adult
48
49 modelling and concerns how modellers negotiate with partners to accommodate their
50
51 modelling activities in shared domestic space. In terms of displaying both layouts
52
53 and completed models the findings revealed how, for us as children, appropriate
54
55 spaces were determined by parents, whereas as adults we had to agree these
56
57 spaces with partners. This negotiation is a feature of the literature involving how
58
59
60

1
2
3 possessions are accommodated in domestic space (Csikszentmihalyi & Rochberg-
4 Halton, 1981; Gregson 2007). The issue is also significant in the railway modelling
5 literature (Andress, 1987; Jenkinson, 2001; Simmons 1998) where a layout or a
6 completed diorama has greater permanence. Our diaries were less concerned with
7 where our models were actually built or the interpersonal consequences of, for
8 example, leaving uncompleted kits on the kitchen table. It is possible that one reason
9 for this not being mentioned is that many construction tasks are transitory and may
10 take place when a partner is absent. As a footnote, it is worth noting that modelling
11 literature discusses the importance of safety issues (e.g. ventilation) in the choice of
12 room in which to engage in model construction (Stanton, 2002).
13
14
15
16
17
18
19
20
21
22
23
24

25
26 Our findings concurred with Simmons' (1998) suggestion of a variety of spaces
27 which may be favoured and sanctioned for modelling, most commonly basements,
28 lofts, spare rooms, garages and sheds. These have been characterised by Yarwood
29 and Shaw (2010, p. 430) as "marginal spaces", i.e. those not normally visited by
30 people outside the household, except by invitation. The significance of this spatial
31 arrangement is not fully clear, but may be a further manifestation of the ambivalence
32 felt towards adult modelling.
33
34
35
36
37
38
39
40
41

42 While our models however were not intended for 'public viewing', the literature shows
43 that others are. Our findings revealed that the different subjects we modelled offered
44 very different creative opportunities between the modelling of static aircraft and
45 railway modelling. As Harrington (2012, p. 20) has pointed out, "railway modelling,
46 more than any other form of model-making, allows the modeller to recreate reality in
47 microcosm". Railway modelling, as it requires a layout, offers greater scope for
48 innovation, giving working model trains meaning and context. It is more demanding
49 of space for display than model aircraft. Andress (1987) and Jenkinson (2001)
50
51
52
53
54
55
56
57
58
59
60

1
2
3 described examples of modellers whose railway dioramas have spread along the
4 family dining room wall or have overtaken the garden. Neil found it much harder to
5 bring 'life' to his static models even when positioned on a stand as if in flight.
6
7
8
9

10
11
12
13 *The social context of modelling as an occupational form*
14

15
16 Other aspects of our findings highlight the social context of modelling as an
17 occupational form. Elsewhere (Pollard & Carver, 2012), we have discussed the
18 widespread perception that modelling is usually a male gendered activity. Our
19 findings do little to dispel this. Firstly, it was our fathers who introduced us, as male
20 children, to modelling. Secondly, as parents, although the range of evidence is
21 limited by the range of actual opportunity, i.e. Neil had no sons, the transmission of
22 skills follows a similar pattern. Nevertheless there are indications in the findings (e.g.
23 Nick did, rather unsuccessfully, share his modelling with his daughters) and in the
24 literature (see Pollard & Carver, 2012), which undermine any deterministic notion
25 that only men are, or could be, modellers.
26
27
28
29
30
31
32
33
34
35
36
37
38

39 Although the literature refers to modelling clubs (Yarwood & Shaw, 2010), these
40 were not part of our experiences. For us building models was (and continues to be) a
41 mainly solitary occupation. Nevertheless our model building was influenced by and
42 took place within significant relationships, notably between fathers and sons. This
43 relationship is a consistent theme in a range of modelling literature and advertising,
44 which in part emphasises modelling, construction skills and an interest in prototypes
45 as a vehicle for building positive relationships between fathers and their children
46 (Marriott, 2012; Pearson, 2007; Ward, 2004). As such, the advertising images of the
47 modelling industry often repeat the idea of the all-skilful and knowing father handing
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 down appropriate skills and values to his children and often represents model-
4
5 making by as a skilled activity for children (and adults) which is valuable, educative
6
7 and instructive (Tri-ang Railways, 1962; Ward, 1999, 2004; Alcorn, 2009).
8
9

10 The role that fathers have in transmitting modelling skills can be significant, as both
11
12 our findings and those of Yarwood and Shaw (2010) demonstrate. However, our
13
14 experiences, as fathers (in Nick's case) and as sons, show the reality to be more
15
16 nuanced than the repeated advertising image. For example, Neil's childhood
17
18 perception that his father was skilled in building plastic kits, was more idealisation
19
20 than reality. Nevertheless their shared modelling activities undoubtedly played a role
21
22 in developing their relationship.
23
24

25
26 Another element of this theme concerns values. While Alcorn (2009) argues that
27
28 modelling has been a vehicle for transmitting of social values and certain desirable
29
30 hegemonic attitudes by parents (including our adult selves) as 'a good thing' this
31
32 does not mean that modelling as an occupation for *adults* is always socially
33
34 sanctioned. Although there is no research evidence to support this, the idea that
35
36 adult modelling may be perceived as 'childish' has been asserted by both ourselves
37
38 (Pollard & Carver, 2012) and Yarwood and Shaw (2010). Neither of us would have
39
40 revealed our involvement in modelling to each other, but for a chance remark about
41
42 Pearson's *Achtung Schweinehund* (2007). Pearson's humorous and perceptive
43
44 autobiographical account of his interest in military models alludes to this discomfort
45
46 around its appropriateness in adults. It enabled our study by making the subject
47
48 'safe' for us to debate. Also, our recollections showed that we both needed a
49
50 personal justification to re-engage with their childhood activity, which revealed our
51
52 ambivalence about connotations of 'not having grown up' and anxiety about social
53
54 disapproval. Although achieving a deeper understanding of ourselves was secondary
55
56
57
58
59
60

1
2
3 to our goal, a byproduct of this study has been that these private anxieties have
4
5 resolved through our recognition of a shared occupational experience.
6
7

8 From a historical and occupational perspective, our findings mainly discuss
9
10 modelling from plastic kits and manufactured items supplied with instructions at a
11
12 time when these products had recently become widely available and affordable. In
13
14 this sense our modelling reflects the recognised shift from scratch and craft
15
16 modelling to the purchase and assembly of the model as a commodity (Butsch,
17
18 1984). Through this commodification modellers, (mainly males) have become
19
20 deskilled passive consumers, caught up in a wider capitalist process that has
21
22 discouraged innovation and disrupted the transmission of 'traditional' and tacit skills
23
24 such as woodworking (Butsch, 1984).
25
26
27

28
29 We consider this thesis to be overstated at least in relation to skill. Our findings show
30
31 how we frequently made our own, and even invented, modifications of the kits we
32
33 have bought in an active process rather than passively following instructions. This
34
35 appears to correspond with some of Dickie's (2003) observations about the ways of
36
37 learning technique she observed in quilting groups. She identifies "less structured" or
38
39 less formal ways of learning such as "trial and error" and "figuring things out" (2003,
40
41 p. 123). However, just as Dickie's quilt makers may have begun with a specific form
42
43 of quilt and progressed in their learning, it is a form of learning which never stops.
44
45 The skilled use of convenient or found materials in modelling has been termed
46
47 "bricolage" (King, 1996, p. 71) and was the aspect of model making which we most
48
49 valued. Bricolage appears to be well established as an occupational form (Riley,
50
51 2011), particularly in the improvised modelling of railway dioramas (Andress, 1988;
52
53 Simmonds, 1998). The skilled incorporation of found materials into models is a
54
55
56
57
58
59
60

1
2
3 matter of occupational performance (Nelson 1988), but the possibilities afforded by
4
5 different materials presented new challenges.
6
7

8 Opportunities for innovation within railway modelling have given rise to the concept
9
10 of the "craft consumer" who in fact does "both design and make the products" that he
11
12 himself consumes (Campbell, 2005, p. 24; Yarwood & Shaw, 2010). While it is less
13
14 clear that the building of plastic kits meets these criteria, we have shown that
15
16 building preformed kits does not necessarily mean that the modeller-as-consumer is
17
18 an uncritical 'dupe' (Campbell, 2005) or indeed, totally deskilled.
19
20
21

22 However, it is undeniable that as children our modelling interests were to some
23
24 extent determined by the modelling industry as an occupational domain. Our findings
25
26 show that our early experiences of modelling appeared to be, at least in part, the
27
28 products of socialisation and also took place at a time in which youth were an
29
30 emergent market. During this time, model manufacturers rapidly became
31
32 sophisticated at developing age-specific products to widen the age-range of the
33
34 market and to socialise people into the hobby as early as possible (Butsch, 1984;
35
36 Tri-ang Railways, 1962; Ward 1999; 2004; Yarwood & Shaw, 2010). As Butch (1984)
37
38 might argue, from a Marxist perspective our 'choices' are illusory and could be better
39
40 described as examples of "pseudo individualisation" (Horkheimer & Adorno, 2002, p.
41
42 445) since they ultimately begin with the purchase of a product. In this sense it might
43
44 be said that while we were making Airfix™ kits, in some small way Airfix™ were
45
46 also making us.
47
48
49
50

51
52 The occupational forms of model making discussed here have been overlooked by
53
54 occupational scientists. Occupational therapy is a predominantly female profession
55
56 in which male gendered activities receive less mention (Angell, 2014; Pierce 2012;
57
58
59
60

1
2
3 Pollard & Carver, 2012). Given the potential for modelling to be used as a vehicle for
4
5 men's wellbeing projects such as Men in Sheds (Ormsby, Stanley, & Jaworski, 2010)
6
7 or similar community based projects. We think there may be worth in further
8
9 exploring the possible benefits of model-making activities as engaging fatherly
10
11 occupations.
12

13 14 15 **Limitations**

16
17
18 This work has several limitations. Firstly, although modelling has been depicted as a
19
20 wide-spread human occupation (King, 1996; Pollard & Carver, 2012), the particular
21
22 forms of modelling here are historically located in a specific culture. The authors are
23
24 products of their time and as baby boomers that time may well have passed.
25

26
27 Modelling and its socioeconomic context has changed in many ways since our youth.
28
29 For example the development of on-line shopping has led in part to the decline of the
30
31 model shop itself, which has literally, in one case, become a museum piece, as a
32
33 recreated full-size shop exterior in Scotland's National Museum of Flight.
34

35
36 Many of our experiences seem to show us as 'typical' modellers of this era,
37
38 particularly in that we are male. On the other hand we are unusual in being able to
39
40 take advantage of our position in academia to exercise a reflexive approach towards
41
42 modelling (rather than simply enjoying it). In the tradition of autoethnography we
43
44 make no claims to generalisability. Further research would need to explore the views
45
46 of those experiences of people of different ages, gender and cultural backgrounds to
47
48 meet the parameters identified by Hocking (2009) as necessary for full in-depth
49
50 description of human occupations.
51
52

53
54
55 Finally, as in all autoethnographic accounts, there is the possibility that we may have
56
57 unconsciously censored our own narratives. Alternatively we may have colluded in
58
59

1
2
3 avoiding potentially emotive material or issues that might have affected our
4
5 relationship or our relationships with others. In retrospect, the involvement of a third
6
7 party to identify omissions or possible contradictions in our accounts may have been
8
9 useful.
10

11 12 **Conclusion**

13
14 While somewhat axiomatic, this article has shown that in any work on modelling the
15
16 'devil is in the detail'. While there are similarities in the experience of making static
17
18 kits of planes and working trains and layouts there are significant differences for the
19
20 modeller, partly resulting from the nature of the prototype modelled and the fact they
21
22 are built to be kept. Nevertheless our account of modelling has shown it to be a
23
24 significant, beneficial occupation to modellers and is a component of their
25
26 occupational engagement with the world (Rebeiro & Cook, 1999). Like textile crafts
27
28 (Pöllänen, 2015), modelling merits further exploration alongside other hobbies and
29
30 leisure activities "that occur, unmonitored, in private spaces" (Yarwood & Shaw,
31
32 2010, p. 425). This would increase understanding of both the occupational form of
33
34 modelling and its potential benefits to wellbeing.
35
36
37
38
39

40 41 **References**

42
43 Alcorn, A. L. (2009). *Modeling behavior: Boyhood, engineering, and the model*
44
45 *airplane in American culture*. (unpublished PhD thesis). Case Western Reserve
46
47 University. Retrieved from:
48
49 https://etd.ohiolink.edu/!etd.send_file?accession=case1220640446&disposition=inlin
50
51 e
52
53
54
55
56 Andress, M. (1988). *PSL complete guide to model railways*. London: Guild.
57
58
59
60

- 1
2
3 Angell, A. M. (2014). Occupation-Centered Analysis of Social Difference:
4 Contributions to a Socially Responsive Occupational Science, *Journal of*
5 *Occupational Science*, 21(2), 104-116. doi: 10.1080/14427591.2012.711230
6
7
8
9
10
11 Baker, N. (1997). Model airplanes. In N. Baker (Ed.), *The size of thoughts*. (pp. 27-
12 35). New York: Random House.
13
14
15
16 Bull, J. (2009). Watery masculinities: Fly-fishing and the angling male in the South
17 West of England. *Gender, Place & Culture, A Journal of Feminist Geography*, 16(4),
18 445-465. doi:10.1080/09663690903003959
19
20
21
22
23
24 Burnier, D. (2006). Encounters with the self in social science research: A political
25 scientist looks at autoethnography. *Journal of Contemporary Ethnography*, 35, 410-
26 418. doi: 10.1177/0891241606286982
27
28
29
30
31
32 Burt, E. L. & Atkinson, J. (2012). The relationship between quilting and well being.
33 *Journal of Public Health*, 34(1): 54-59. doi: 10.1093/pubmed/fdr041
34
35
36
37
38 Butsch, R. (1984). The commodification of leisure: The case of the model airplane
39 hobby and industry. *Qualitative Sociology* 7(3), 217-235. doi: 10.1007/BF00987312
40
41
42
43 Caldwell, L. L. (2005). Leisure and health: Why is leisure therapeutic? *British Journal*
44 *of Guidance & Counselling*, 33(1), 7-26. doi: 10.1080/03069880412331335939
45
46
47
48
49 Campbell, C. (2005). The craft consumer: Culture, craft and consumption in a
50 postmodern society. *Journal of Consumer Culture*, 5, 23-47. doi:
51 10.1177/1469540505049843
52
53
54
55
56
57
58
59
60

1
2
3 Clatworthy, J., Hinds, J., & Camic, P. M. (2013). Gardening as a mental health
4 intervention: A review. *Mental Health Review Journal*. 18(4), 214-225. doi:
5 10.1108/MHRJ-02-2013-0007
6
7
8

9
10 Csikszentmihalyi, M., & Rochberg-Halton, E. (1981). *The meaning of things:*
11 *Domestic symbols and the self*. Cambridge: Cambridge University Press.
12
13

14
15
16 Dickie, V. A., & Frank, G. (1996). Artisan occupations in the global economy: A
17 conceptual framework. *Journal of Occupational Science. Australia*, 3(2), 45-55.
18
19
20
21 doi:10.1080/14427591.1996.9686407
22

23
24 Dickie, V. A. (2003). The role of learning in quilt making, *Journal of Occupational*
25 *Science*, 10(3), 120-129. doi: 10.1080/14427591.2003.9686519
26
27

28
29 Dickie, V. A., Cutchin, M. P., & Humphry, R. (2006). Occupation as transactional
30 experience: A critique of individualism in occupational science. *Journal of*
31 *Occupational Science*, 13(1), 83-93. doi: 10.1080/14427591.2006.9686573
32
33
34

35
36 Ellis, C., Adams, T. E., & Bochner, A. P. (2011). Autoethnography: An overview.
37
38
39 *Frum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 12(1) Article
40
41
42 10. Retrieved from: [http://www.qualitative-](http://www.qualitative-research.net/index.php/fqs/article/view/1589/3095)
43 [research.net/index.php/fqs/article/view/1589/3095](http://www.qualitative-research.net/index.php/fqs/article/view/1589/3095)
44
45
46

47
48 Foster, K., McAllister, M., & O'Brien, L. (2006). Extending the boundaries:
49
50 Autoethnography as an emergent method in mental health nursing research.
51
52
53 *International Journal of Mental Health Nursing*, 15, 44-53. doi: 10.1111/j.1447-
54
55
56
57
58
59
60 0349.2006.00402.x

1
2
3 Freadman, R. (2004). Decent and indecent: Writing my father's life. In J. P. Eakin
4 (Ed.), *The ethics of life writing*, (pp. 121-146). Ithaca NY: Cornell University Press.
5
6

7
8
9 Gregson, N. (2007). *Living with things: Ridding, accommodation, dwelling*. Wantage:
10 Sean Kingston Publishing.
11

12
13
14 Harrington, R. (2012). *Miniature railways and cultural microcosms: Railway*
15 *modelling in Britain, c1900-c.1950*. Retrieved from:
16 www.artificialhorizon.org/essays/pdf/modrlys.pdf.
17
18
19

20
21
22 Harkin, J., & Huber, J. (2004). *Eternal youths: How the baby boomers are having*
23 *their time again*. London: Hendeby Banks.
24
25

26
27
28 Hocking, C. (2008a). The way we were: Romantic assumptions of pioneering
29 occupational therapists in the United Kingdom. *British Journal of Occupational*
30 *Therapy*, 71(4), 146-154. doi: 10.1177/030802260807100405
31
32
33

34
35
36 Hocking, C. (2008b). The way we were: Thinking rationally. *British Journal of*
37 *Occupational Therapy*, 71(5), 185-195. doi: 10.1177/030802260807100504
38
39

40
41
42 Hocking, C. (2009). The challenge of occupation: Describing the things people do.
43 *Journal of Occupational Science*, 16(3), 140-150. doi:
44 10.1080/14427591.2009.9686655
45
46
47

48
49
50 Horghagen, S., Josephsson, S., & Alsaker, S. (2007) The use of craft activities as an
51 occupational therapy treatment modality in Norway during 1952–1960. *Occupational*
52 *Therapy International*, 14(1), 42–56. doi: 10.1002/oti.222
53
54
55

1
2
3 Horkheimer, M., & Adorno T. W. (2002). *The dialectic of enlightenment:*
4
5 *Philosophical fragments*. Edmund Jephcott, trans. Stanford: Stanford University
6
7 Press.
8
9

10
11 Hornby, Plc. (2013). *Annual report and accounts 2013*. Retrieved from:
12
13 <http://online.hemscottir.com/ir/hrn/pdf/ar2013.pdf>
14

15
16 Howell, D., & Pierce, D. (2000). Exploring the forgotten restorative dimension of
17
18 occupation: Quilting and quilt use. *Journal of Occupational Science*, 7(2), 68-72.
19
20 doi:10.1080/14427591.2000.9686467
21
22

23
24 Huang, L., & Shi, H. (2015). Keeping up with the Joneses: From conspicuous
25
26 consumption to conspicuous leisure. *Oxford Economic Papers*, 67(4), 949-962. doi:
27
28 10.1093/oep/gpv021.
29
30

31
32 Jenkinson, D. (2001). *Historical railway modelling*. York: Pendragon.
33
34

35
36 King, J. R. (1996). *Remaking the world, modeling in human experience*. Urbana, IL:
37
38 University of Illinois Press.
39
40

41
42 Lapadat, J. C. (2009). Writing our way into shared understanding: Collaborative
43
44 autobiographical writing in the qualitative methods class. *Qualitative Inquiry*. 15, 955-
45
46 979. doi: 10.1177/1077800409334185
47
48

49
50 Lapadat, J. C., Black, N. E., Clark, P. G., Gremm, R. M., Karanja, L. W., Mieke, M., &
51
52 Quilan, L. (2010). Life challenge memory work: Using collaborative autobiography to
53
54 understand ourselves. *International Journal of Qualitative Methods*, 9(1), 77-104. doi:
55
56 10.1177/160940691000900108
57
58
59
60

1
2
3 Lauwert, M. (2008) Playing outside the box - on LEGO toys and the changing world
4 of construction play. *History and technology*, 24(3), 221-237. doi:
5
6
7 10.1080/07341510801900300
8

9
10
11 Marriott, R. (2012). *Meccano*. Oxford: Shire Books.
12

13
14 Nelson, D., & Jepson-Thomas, J. (2003). Occupational form, occupational
15 performance and a conceptual framework for therapeutic occupation. In P. Kramer, J.
16 Hinojsa, & C. B. Royeen (Eds.), *Perspectives in human occupation, participation in*
17 *life* (pp. 87-155). Philadelphia, PA: Lippincott Williams & Wilkins.
18
19
20
21
22

23
24 Office of National Statistics. (2012). *2011 Living costs and food survey*, Chapter 1
25 Overview. Retrieved from: http://www.ons.gov.uk/ons/dcp171766_285895.pdf
26
27

28
29
30 Ormsby J., Stanley, M., & Jaworski, K. (2010). Older people's participation in
31 community-based men's sheds programmes. *Health And Social Care In The*
32 *Community*, 18(6), 607-613.
33
34
35

36
37 Pearson, H. (2007). *Atchung schweinehund, a boy's own story of imaginary combat*.
38 London: Little, Brown.
39
40

41
42
43 Pierce, D. (2012) Promise, *Journal of Occupational Science*, 19:4, 298-311, DOI:
44
45 10.1080/14427591.2012.667778
46
47

48
49 Pollard, N., & Carver, N. (2012). Models and human occupation. In N. Pollard, & D.
50 Sakellariou, (Eds.). *Politics of occupation-centred practice, reflections on*
51 *occupational engagement across cultures*, (pp. 180-196). Oxford: Wiley.
52
53
54
55
56
57
58
59
60

1
2
3 Pöllänen, S. (2015). Elements of crafts that enhance well-being: Textile craft makers'
4 descriptions of their leisure activity. *Journal of Leisure Research*, 47(1), 58-78.
5
6

7
8 Rebeiro, K. L. & Cook, J. V. (1999). Opportunity, not prescription: An exploratory
9 study of the experience of occupational engagement. *Canadian Journal of*
10 *Occupational Therapy*, 66(4), 176-187.
11
12

13
14
15
16 Reed, K., Smythe, L., & Hocking, C. (2013). The meaning of occupation: A
17 hermeneutic (re)view of historical understandings, *Journal of Occupational Science*,
18 20(3), 253-261. doi: 10.1080/14427591.2012.729487
19
20
21

22
23
24 Riley, J. (2008). Weaving an enhanced sense of self and a collective sense of self
25 through creative textile-making, *Journal of Occupational Science*, 15(2), 63-73.
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

31
32 Riley, J. (2011). Shaping textile-making: Its occupational forms and domain, *Journal*
33 *of Occupational Science*, 18(4), 322-338. doi: 10.1080/14427591.2011.584518
34
35
36

37
38 Riley, J., Corkhill, B., & Morris, C. (2013). The benefits of knitting for personal and
39 social wellbeing in adulthood: Findings from an international survey. *British Journal*
40 *of Occupational Therapy*, 76(2), 50-57. doi: 10.4276/030802213X13603244419077
41
42
43
44

45
46 Royal College of Psychiatrists. (2010). *No health without public mental health: the*
47 *case for action*. London: Author.
48
49

50
51
52
53
54
55
56
57
58
59
60

54
55
56
57
58
59
60

1
2
3 Suto, M. (1998). Leisure in occupational therapy. *Canadian Journal of Occupational*
4
5 *Therapy*. 65(5), 271-278.
6

7
8 Tri-ang Railways. (1962). *The first ten years...* Margate: Author
9

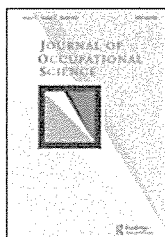
10
11 Yarwood, R., & Shaw, J. (2010). 'N-gauging' geographies: craft consumption, indoor
12
13 leisure and model railways. *Area*, 42(4), 425–433,
14

15
16
17 Ward, A. (1999). *Airfix: Celebrating 50 years of the greatest plastic kits in the world*.
18
19 London: Harper Collins.
20

21
22
23 Ward, A. (2004). *Classic kits: Collecting the greatest model kits in the world, from*
24
25 *Airfix to Tamiya*. London: Harper Collins.
26

27
28
29 Ward, A. (2009). *The boys' book of Airfix: Who says you ever have to grow up?*
30
31 London: Random House.
32

Journal of Occupational Science



Building model trains and planes: An autoethnographic investigation of a human occupation.

Journal:	<i>Journal of Occupational Science</i>
Manuscript ID	ROCC-2015-0019.R2
Manuscript Type:	Feature (research and review)
Keywords:	human occupation, model building, modelling, hobbies, leisure

SCHOLARONE™
Manuscripts

URL: <http://mc.manuscriptcentral.com/rocc>

URL: <http://mc.manuscriptcentral.com/rocc>

Journal of Occupational Science

Preview

Abstract: This research paper utilises an autoethnographic method, termed collective autobiography, to explore the nature and meaning of the amateur hobby of building models from childhood to adulthood. Hobbies and leisure activities are areas of human occupation of increasing interest to a variety of disciplines e.g. healthcare. Although model making may concern the miniature representation of any subject, this paper focuses on the construction of model aircraft kits, trains and their layouts. As a complex specific human occupation modelling is revealed as contributory to personal wellbeing, and while the activity may start in childhood its associated motivations and required skills develop over a life time. The findings also reveal aspects of the nature of the relationship between the modeller, the process of modelling and the final product. In addition they also reveal some elements of the gendered nature of modelling, its role within father-son relationships, and the accommodation of modelling activities within shared domestic spaces. The modeller is seen to be a creative individual and a consumer. The specific modelling activities described are recognised as having their origins within the culture of post-war baby boomer Britain, and the socioeconomic and technological environment of that period.

 Close Window

1
2 Page 1 of 32
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Building model trains and planes: An autoethnographic investigation of a human occupation.

Key words: human occupation; model building; modelling; hobbies; leisure

This research paper utilises an autoethnographic approach which is termed collective autobiography (Lapadat, 2009; Lapadat et al., 2010). Its task is, as Dickie (2003, p. 120) remarks, "first to describe the occupation, and second to attempt to understand the process, outcomes, and experience of the occupation", namely the adult hobby of building models. (p. 120).

This information is repeated in the method on p 6-7. delete
more references to p 6
more to "aim" - p. 5.
This paragraph is ~~redundant~~ ~~to state~~ ~~of aim~~ ~~AS stated~~

Modelling appears to be a largely uninvestigated human occupation (Pollard & Carver, 2012) which has begun to arouse interest in a range of disciplines, for example in cultural history (King, 1996), geography (Yarwood and Shaw, 2010) and social history (Harrington, 2012). King's exploration (1996) suggests that model making is ~~apparently~~ ubiquitous through human society, in evidence as a ~~human~~ occupation since prehistoric times. He describes it as "constructing, collecting and operating tiny models of larger prototypes [...] generally but not always smaller and usually of materials different to those of the original". In modelling, the word prototype ~~refers to~~ the original object being modelled (King, 1996, p. 3). The term 'model making' may be used to describe different activities including building without plans from raw materials ('scratch-building') through to the assembly and modification of mass-produced kits using individual scratch-built parts made from recycled, junk or preformed items (King, 1996). King (1996) thus suggests that model-making is a craft based leisure occupation, through the varied use of tools and materials in periods of spare time activity. Model making may commonly include representing

everything from vehicles to historical figures, from individual buildings to complete landscapes, using a wide variety of materials.

Although ubiquitous the nature of modelling has changed over time. Notably the technologies which facilitated the injection moulding of plastics enabled a mid-20th century boom in the affordability and availability of kit models (Pollard & Carver, 2012). In 2013, a key model manufacturer, Hornby PLC, reported a turnover of £43.135m in the UK alone. Although models are available in a variety of scales, the most common were 1/72nd scale for aircraft and 1/76th and 1/87th (referred to as OO/HO as both run on the same track gauge) for trains. This means that most such models are under a foot (or 30cms) in length, a size which can be accommodated in most domestic spaces. Although there are well documented exceptions, it is generally asserted that most such model making is performed by men (Pollard & Carver, 2012).

Our study ~~was conducted with the intention of providing~~ ^{provides} an insider perspective on this form of modelling. More specifically it ~~will focus~~ ^{focuses} on the building of static scale aircraft (as opposed to, for example, cars or flying model aircraft) and the construction of working model trains and their layout (as opposed to static models of trains).

These aspects of model making correspond to Riley's (2011, p. 323) account of craft as an occupational form through construction and "bodily interaction" with materials, and her account of doing as an occupational performance. The occupational form ~~this form~~ of modelling arises from such pre-determined structures as preformed kits

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

provides
focuses
define

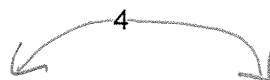
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

or the choice of particular materials which define its performance, as for example has been identified in occupations such as textile making (Nelson & Jepson-Thomas, 2003; Riley, 2011). In addition our exploration of the modelling of aircraft and railways will recognise its historical and socioeconomic context (or "domain", Dickie, 2003, p. 121), as well as its meaning to modellers. This also reflects the increasing study of occupations concerning their broader social contexts rather than as individual ^{broader focus} ~~activities~~ ^{pursuits}, in which their purpose, meaning and goals are located in particular times, cultures and places (Dickie, 2003; Dickie, Cutchin & Humphry, 2006; Riley, 2008; Hocking, 2008a, 2008b).

Authors such as Suto (1998), Howell and Pierce (2000) and Horghagen, Josephsson and Alsaker (2007) have described a significant history of interest within both occupational science and occupational therapy concerning hobbies and craft based leisure occupations. Crafts are important ~~occupational~~ aspects of individual and cultural expression in changing economies (Dickie ^{and} Frank, 1996), even where makers are following kit instructions (Pöllänen, 2015). Some craft hobbies and activities, such as quilting (Howell ^{and} Pierce, 2000; Dickie, 2003; Riley, 2008, 2011; Riley, Corkhill, & Morris, 2013), have enjoyed a particular focus in this literature.

This area of study is becoming significant because there appears to be a greater engagement in leisure pursuits than ever before. Within the UK alone, adults doubled their spending on leisure between 1976 and 2002, when it became the largest area of household expenditure. This disposable income is spent on the products of a considerable leisure industry catering to a plethora of specialist

interests including modelling (Pollard & Carver, 2012; Office of National Statistics, 2012).



alphabetic sequence: O, P

Baby boomers, those belonging to "the unusual demographic blip of babies born in the UK between 1945 and 1965" (Harkin & Huber, 2004, p.11) in particular have returned to products and pursuits from their youth, which Harkin and Huber (2004, p. 37) describe as "down-ageing". Lauwert (2008, p. 233) noted a phenomenon of these "adults staying younger longer". This group is collectively both in possession of the disposable income and the time necessary to facilitate these interests, both important factors in the economy of leisure occupations (Huang & Shi, 2015).

- not just a UK phenomenon

In addition there is increased recognition that wellbeing and identity can be expressed through diverse leisure activities and hobbies as much as through other occupations (Caldwell, 2005). This applies whether they are socially organised in craft guilds and networks (Riley, 2008; Pöllänen, 2015) or, like fishing, participated in by solitary individuals (Bull, 2009). There is also a growing discourse around the value of leisure within healthcare in general (e.g. Royal College of Psychiatrists, 2010; Clatworthy, Hinds, & Camic, 2013) and occupational therapy (Suto, 1998; Pollard & Carver, 2012). Wellbeing studies of quiltmaking (Burt & Atkinson, 2012) and women textile craft makers (Pöllänen, 2015) draw extensively on occupational science and therapy sources. Although Caldwell (2005) has recognised that the mechanisms through which leisure is therapeutic have not yet been fully addressed, there is agreement that it can have benefits for "physical, social, emotional and cognitive health" (p15).

- citations in alphabetic order

(p. 15).

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

discussions.
~~Despite the above,~~ Modelling has not featured in these debates. The research literature on modelling is sparse. One exception is King's (1996) study of model making in general, which includes some casual interviews with model makers. More recently, Yarwood and Shaw's (2010) investigation used 22 semi-structured interviews with railway modellers (i.e. people who specifically model railways) in an 'attempt' "to listen to the stories that railway modellers tell..." (p. 431). There is no parallel study of the building of static model aircraft.

Most of the existing literature on building models is produced by the modelling community itself (e.g. Pearson, 2007, Stanton, 2002). It is primarily concerned with modelling techniques and mainly consists of 'how to' guides, but there is also an emerging genre of nostalgic literature describing iconic models and manufacturers such as, in the UK, Airfix™ and Hornby™ (e.g. Ward, 1999; 2004; 2009). This literature in itself may be said to represent some of the preoccupations of the baby boom generation.

Aims

This study ~~aimed at beginning~~ ^{begins} to address the lack of empirical work on modelling as a human occupation. The broad aim was to explore the experience of modelling as a purposeful and meaningful occupation from the perspective of the modeller as an adult. However, we acknowledge that any discussion of models must also recognise that this ^{practice} ~~behaviour~~ may begin in childhood (King, 1996; Pollard & Carver, 2012). A secondary aim, therefore, was to explore our recollections of childhood modelling. Following other studies (e.g. Riley et al., 2013) we wished to both explore the

process of production (in this case, modelling as an occupational form) and the meaning of the product itself (in this case, the model as occupational performance).

Method

Given our aims and interests we ~~wished to use~~ a pragmatic and convenient qualitative method which would enable us to utilise our own experiences, to explore the potential for a larger scale study and which would generate rich data.

Methodologies which contain both personal and academic elements such as auto-ethnography are of increasing interest in the field of qualitative research (Burnier, 2006). Auto-ethnography uses personal narrative to critically explore experiences (Muncey, 2010). This approach is not without its critics, and there is recognition that some have found it difficult to accept as a credible research method (Foster,

McAllister, & O'Brien, 2006). This is partly because of its embrace of subjectivity. To be effective auto-ethnography requires a disciplined and rigorous approach to produce a narrative which is meaningful to others rather than merely for oneself.

Here rigour and discipline entail transparency and clarity with regard to the subjective elements of this approach and the particular nature of individual narratives (Ellis, Adams, & Bochner, 2011). Lapadat (2009, p. 967) describes an approach to autoethnography, which she termed "collaborative autobiography", involving several authors both interpreting their own and others' accounts. In this case both authors were the sole participants.

For Lapadat (2009) this approach allows the writers to retain their separate identities, (Lapadat, 2009).

Given the differences and similarities in our backgrounds, we felt that this approach would best suit our purpose. In addition we felt that the following biographical factors

an outcome of? the model in itself is not a performance?

selected ~~selected~~ used an autoethnographic approach, which is that enables researchers to critically explore their own experiences (Muncey, 2010)

Trade approach

inconsistent use of hyper

credible?

both the two

collective autobiographies researchers

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2 Page 7 of 32
3
4
5
6
7 enabled us to produce authentic accounts of our modelling: Firstly, both of us were
8
9 actively engaged in modelling (one with an interest in planes and the other in trains).
10
11 Secondly our initial discussions showed that as children we had both engaged in
12
13 model making. Thirdly, we are both baby boomers who began modelling in late
14
15 1960s Britain as children, and now in our 50s, had the income and the time to
16
17 engage in this leisure form. Finally, our backgrounds in in mental health settings with
18
19 an active interest in therapeutic activities, Neil as a nurse and Nick as an
20
21 occupational therapist, and in research have necessitated the ability to be reflexive in
22
23 both writing and interpersonal contexts and "make visible the beliefs and values"
24
25 present in our narratives (Foster et al., 2006, p.46).
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

308 Within collaborative autobiography there can be an emphasis on the deeper
309
310 understanding of self as a goal in itself (Lapadat, 2009; Lapadat et al., 2010). For us,
311
312 this personal understanding was secondary to our goal of investigating modelling as
313
314 a human occupation per se. The following is an account of our investigative process.
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360

Step 1

We agreed we would each would keep a diary for a ^{6-month} six-month period from a given
start date, to keep the study within a reasonable time frame. The diary was to
contain free text concerning current modelling experiences and related
reminiscences. We were free to make diary entries when we felt fit.

Step 2

Each of us read ^{the} each others' ^{diaries} diaries. We also checked our shared understanding of
the content and isolated significant themes.

Step 3

These themes were then subjected to "interpretive discussion" (Lapadat, 2009, p.969) and when agreement was reached were grouped and 'collapsed' into what we felt to be the most significant major themes.

Throughout steps 1-3 we were continually engaged in a "recursive dialogue" (Lapadat, 2009, p. 958), discussing our own and each others' experiences. We also continued to read and share literature related to model making.

Ethics

Discussion with a representative of the university ethics committee suggested that we did not need to gain formal ethical approval, because we both consented to share our data. It is worth noting however that there can be ethical concerns in such autobiographical work, for example the lack of anonymity of the researcher subjects (e.g. Lapadat et al., 2010) and what we might reveal about other people in our personal lives (Freadman, 2004). Although we felt that there was little of contention in our disclosures, we continually monitored them and did not identify any concerns.

Findings

Each of our diaries ran to over 90,000 words. The following sections summarise our findings under major themes, the first of which corresponds to occupational domain issues, while the remainder combine aspects of occupational performance and occupational form. We have used the collective first pronoun to refer to shared findings, and our own names to identify individual experiences.

Socialisation

3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

We both described early childhood interests in trains (Nick) and aeroplanes (Neil) and recollect that at the time (in the 1960s) our parents, particularly our fathers, took us to preserved or 'heritage' railways, airshows, or air and railway museums. In addition, some of Nick's relatives had worked in the railway industry and shared their experiences with him. We actually began building models in the years approaching our teens. In both accounts of building models in our childhoods our fathers featured significantly and the positive encouragement from them seems to have reinforced our engagement in the activity: *occupation.*

For Neil the modelling of aeroplanes eventually became a significant aspect of relating to his father and became a shared indulgence. As an adult this afforded Neil a means of maintaining their male relationship in an almost completely female family, even beyond his father's death:

Dad built for me, we built together, he and I built a little on our own, I built for him and now I have begun to build just for me. *[...]* the activity connects me with my youth and warm memories of parents (particularly dad).

Nick tried to share his adult enjoyment of modelling with his son and daughters, although his son took more active interest. Neil had no sons but never thought to involve either of his daughters in building models.

Neither of us built models from scratch; those that we described making were commercially available kits. Neil's father however did have skills in both scratch building and the construction of solid scale wooden planes, hand carved from nothing more than a plan. Neil remembered being encouraged to try and work with wood but never took it up and looked to his father for help in making plastic kits. Looking at the surviving results of these modelling forays Neil recognised that his

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

father actually had few skills in working with plastic, which for him would have been a new medium.

Modelling Choices ^{lower case}

Our diaries showed that whether as children or as adults we preferred to model a particular subject, i.e. aeroplanes or trains, rather than taking an interest in the *process* of modelling per se. In addition we were attracted to the models of specific prototypes that we simply liked e.g. the Hawker Hurricane or English Electric Deltic Diesel. While we both recognised that as adults we could have purchased finely detailed ready-made models of these subjects, Neil described preferring to build a kit instead because it involved elements of self-expression. As he said: "there is something about being able to say: I built that, even if everyone else has built it in the same way."

Our findings suggest that our simple attraction to a particular model was not defined by conventional aesthetics. For example Neil recognised that the shape of the Second World War Spitfire fighter aircraft was commonly perceived as beautiful but, like Nick, described an attraction to less obviously appealing prototypes, e.g. "insect like" reconnaissance aeroplanes with their complex observation windows and aerials, models with bright or eccentric paint schemes, or those of unconventional, even 'ugly' appearance e.g. the Westland Wyvern aircraft. We both acquired certain models because of their 'fit' with others we had already constructed, while other kits were acquired because of the iconic status and the historical and social connotations of the prototype (such as the Concorde airliner).

Our diaries also show that our motivations and choices in modelling changed over time. At first we were bought model kits chosen by adults as presents, even at an

1
2 Page 11 of 32

Journal of Occupational Science

11

3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

age where we had minimal modelling abilities (around 7 years). When we were older (at around 10 years), we were able to exercise our own choices within the limits of our pocket money. At that time we were considered old enough to "go into town to the model shop" independently.

By mid-adolescence (15-16 years) both of us had almost totally abandoned modelling. As a child Nick thought that modelling was a 'grown-up' activity, but as an adolescent he felt that modelling was disparaged by his peers: "What adult person lines his living room with model aircraft?" For Neil his growing political awareness as an adolescent and exposure to televised news of the Vietnam war meant he felt very uncomfortable modelling military subjects.

Despite these misgivings we both returned to modelling in later adult life, in our forties. Neil's main motivation was to re-establish a shared interest with his father but he retained an ambivalence regarding military subjects. While Neil encouraged his father to choose kits that they both might enjoy together, he now did all the building. Nick had wanted the justification to resume his railway interest for some years and being able to share building a model railway with his children gave him the necessary justification to recommence modelling. For both of us these initial motives transmuted into genuine interests in their own right.

The findings also showed that both authors modelled simply because they liked it, but there were other emotional and psychological benefits. Neil enjoyed

...the sense of absorption. In a world of build or paint, everything else fades.

As an individual prone to worry that is quite an attraction. There is also the balance of problem solving and creativity. Instructions can be woefully inadequate and patience is required to understand the minimal instructions.

11

URL: <http://mc.manuscriptcentral.com/rocc>URL: <http://mc.manuscriptcentral.com/rocc>

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

For both of us model building provided a sense of accomplishment. As Neil said: "I am somehow forced to try and get better, or at least till I can say it's good enough..."

Building models ... has enabled me to take more of a long view - to be patient."

Nick also discovered that he enjoyed endlessly "tinkering with" and modifying his railway models while building them, more than actually finishing them.

The Modelling Process

This section explores findings about the *processes* involved in the model's construction or its occupational form. Our abilities to build models developed as we got older. Neither of us remembered being dissatisfied with our models at the time, however our recollections are that, as children, our finished kits were at first marred by hasty assembly, resulting in gluey thumbprints and messy paintwork. Clearly some of the kits given to us as children may also have been beyond our skill levels. Both of us still possessed later examples of their adolescent modelling which showed greater finesse in completion. Our accounts of more recent modelling projects revealed a more sophisticated approach, and an overwhelming concern with matters of detail and accuracy. Nevertheless, this always meant accommodating technical compromises to produce 'good enough' models. Our accounts described several models which when finished were not exact representations of the actual prototype but were still satisfactory. For example, Nick and his son combined a static plastic kit with a recycled chassis. The resulting locomotive, which they found acceptable, nevertheless rode "slightly too high off the track". This would have been a serious design fault if found in the real engine.

Some compromises resulted from the fact that, as Neil pointed out, "some scale details are in fact impossible to model at the correct scale. The rigging on early

1
2 Page 13 of 32

Journal of Occupational Science

13

3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

aeroplanes would be virtually invisible if accurately scaled down". Additional compromises derived from limits in our technical ability, the cost of materials and the availability of time. Neil also noted that some model kits included parts for their interior (such as crew seating) which could not be seen once the model was finished. Nonetheless he spent time and energy in completing these details.

Both of us described modifying kits for a variety of reasons. As Neil said, "any modifications" he would make, however historically inaccurate, would still be concerned with viewing the plane as representing reality, but hopefully "*more so*". Sometimes *extra* details would be added to make the model "come alive", or to personalise the model. This included fictitious paint schemes or items such as aerals. The construction of the latter could necessitate the use of unusual source materials and the process of scratch building some parts. For example Neil improvised the rigging for an aircraft aerial using his own hair. While this particular technique was advocated by other modellers (Stanton, 2002), both of us sometimes invented techniques. For example, Neil decided to make the seatbelts for a model aircraft "from a sample of fabric that was once part of a [real] biplane [...] - it just seemed to have the right feel."

One aspect of the modelling process which both authors reported might be described as an 'exploratory' phase in the building of any model; between buying a new kit and its assembly. This involved experimentally holding the unglued parts together to visualise the finished product as if in disbelief that the finished kit would actually produce a replica of the prototype. Neil said:

When I try to hold fuselage halves together, well before the point they should be glued, it is to see what it will look like. I am always surprised it looks like, *almost unbelievably*, a scale model of the plane it represents.

13

URL: <http://mc.manuscriptcentral.com/rocc>URL: <http://mc.manuscriptcentral.com/rocc>

Perceptions of the Model

This section will explore entries in our diaries concerning our perceptions of models and their relationship with the spaces in which they are displayed. As stated in the previous section both authors built kits to be kept, rather than to be gifted or sold. Although neither of us described ourselves as a 'collector', the purchase of kits was not random. For example, as Neil said, "a 'collection' (sic) has emerged" composed of models that he liked and which seemed to follow loose themes (e.g. planes in 1930s American paint schemes). As an adult Neil continued to accumulate model kits even when recognising that it would be unlikely they would be built for some years.

Both authors remembered that as children they 'played' with their completed models as if they were toys. As they got older Neil's finished models became simply objects of display while Nick had become interested in working railway layouts. After he returned to modelling he found himself always "doing a bit more" to a model or "messaging about" i.e. running trains and "tinkering" with a never-to-be finished diorama.

As noted we both valued our models not only as accurate representations of their prototypes but also as objects in their own right. In addition we both described being able to appreciate the prototype through the facility of being able to pick up the model and examine it from different perspectives. Nick described how as a child he attempted to enter the spectacle of his model railway by positioning his eye at the same level as the Airfix™ figures and toy cars which populated his layout: "I spent a lot of time trying to get an 'OO/HO eye view' of the results".

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

m lower case

not sure why you need this?

1
2 Page 15 of 32

Journal of Occupational Science

15

We both also referred to our models as if they were animated or alive. For Nick this was in part because his model trains were powered and therefore moved. For Neil the addition of extra details served this purpose: "the bits and bobs, small aerals or small transfers are what often make a model *come to life*" (emphasis added).

The findings also show that when they are displayed model trains and planes seemed to occupy a figurative space even bigger than the model itself, i.e. a model train only makes sense when displayed on a track. Thus Neil's desire as a child was to create the illusion of the model aircraft flying by suspending it from fishing line or mounting it on a transparent stand. For Nick's trains to appear 'real', this always necessitated building a more complex and complete diorama with additional scenery that appeared to give them a context.

As children, we both displayed our models in our own bedrooms. However, as adults with homes and families, the spaces in which we displayed our models were negotiated with our partners. Neil's model aircraft occupied a basement and Nick's trains the garage loft. These were personal areas which only interested visitors would see, rather than communal spaces or places. Finally the size of the available space in which to display models has an impact on what is actually modelled. Neil never built models greater than 1/48th scale because there was simply nowhere to put them.

Discussion

The findings demonstrate some of the dimensions of a significant leisure occupation; the construction of scale models for children and adults in late 20th century Britain. They detail the modeller's experiential and intimate relationship with the model, both as an object in itself and as a literal representation of the prototype.

discussion is longer than the findings, and somewhat circular. Please consider my notes and reorganise under at least 2 subheadings - a section on more experiential aspects and one on more societal perspectives of the occupational form of modelling

15

URL: <http://mc.manuscriptcentral.com/rocc>

URL: <http://mc.manuscriptcentral.com/rocc>

you come back to creativity later - don't need it here

Firstly, modelling is shown to be a significant occupation to the modeller in terms of the development of performance components: cognitive and psychomotor skills and creativity. It also can bestow psychological benefits such as enjoyment, relaxation and a sense of absorption. These findings concur with King (1996) and more recent research on other adult recreational occupations such as quilting (Burt & Atkinson, 2012) or knitting (Riley, et al., 2013). This later body of work emphasises the role of these occupations in maintaining personal wellbeing. Adult model making appears to have a place in this growing discourse.

you pick up the idea of skill development again at the bottom of the page. It works better there suggest delete this

For us though modelling began in childhood and although we were able to give some recollections of our childhood experiences as modellers these retrospective accounts are insufficient to capture child and adolescent perspectives. Nevertheless from the perspective of occupational domain we appear to be typical modellers, in that we were members of one of the first generations to have regular access to 'pocket money' in the 1960s economic boom. At that time buying and making models were activities which might be said to represent a boy's 'rite of passage', to be temporarily abandoned in adolescence and later resumed in adult life. This trajectory is widely recognised by commentators on modelling e.g. Ward (2004, 2009) and in research findings (Yarwood and Shaw, 2010). It was apparent, at least for us, that modelling

was both enjoyable, satisfying and one of the ways in which we realised increasing personal autonomy and consumer skills.

We have also shown that other aspects of modelling may actually be more valuable to the modeller than finishing a model or realising a larger project such as a railway layout. Firstly, even anticipating the building of a kit is a pleasurable occupation. Secondly, some experiences in the 'doing' of modelling are equally rewarding. These, for example, include tinkering and problem solving. Over time, our modelling skills

a boy's

experiential account ? belongs in findings

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

personal benefits

trajectory

benefits. / belongs with paragraph above?

1
2 Page 17 of 32
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

developed and it was apparent that we had both acquired a detailed awareness of the behaviour of materials such as plastics and also the ability to picture the effect of modifications on the final appearance of the model. Throughout the entire modelling process there appears to be a tension between the modeller's idea of the prototype and the struggle to achieve it in reality, which may necessitate compromise between occupational performance and occupational form.

as skilled performance

not certain what you mean, An illustrative example might

Some of our reported modelling experiences are much more difficult to explain.

odd clarity

These include the sense of "surprise" that models actually do resemble their prototypes, or the time and energy spent modelling details that are not visible or accessible in the finished model, and the visual appeal of apparently 'ugly' models.

challenge

Baker (1997, p. 33) in a literary essay on the model aeroplane describes the attraction to modellers of the details sometimes responsible for this ugly appearance: the "rivets, knobs, hulls, wires, hinges, visible missiles, sensors, gun blisters - all those encrustations that ... make imitation ... difficult enough to be worthwhile". It seems here that Baker is suggesting that the attraction of the model is the challenge it represents to the builder, though this did not motivate our purchasing choices.

As modellers we both related both to the model as a thing-in-itself (e.g. a well-constructed model) and as an accurate representation of its prototype. While models are often displayed in purpose-built cases, both of us were drawn to attempting to simulate their prototypes' 'natural environment' e.g. a railway track to run on. This and the addition of detail such as weathering (simulating the effects of use, wear and tear) illustrate a concern with creating an impression that the model has 'life'.

experiential account - ? belongs in findings

ac

Other aspects of our findings highlight the social context of modelling. Although the literature refers to modelling clubs (Yarwood & Shaw, 2010) these were not part of our

of

experiences, and for us building models was (and continues to be) a mainly solitary ^{occupation} activity. Nevertheless our model building was influenced by and took place within significant relationships, notably between fathers and sons. This relationship is a consistent theme in a range of modelling literature and advertising, which in part emphasises ^{modelling} the activity as a vehicle for building positive relationships between fathers and their children (Marriott, 2012; Pearson, 2007; Ward, 2004).

occupational form - social

^{As such,} The advertising images of the modelling industry often repeat the idea of the all-skillful and knowing father handing down appropriate skills and values to his children. and often represents model-making ^{by} as a skilled activity for children (and adults) which is valuable, educative and instructive (Tri-ang Railways, 1962; Ward, 1999, 2004; Alcorn, 2009).

occupational form

The role that fathers have in transmitting modelling skills can be significant, as both our findings and those of Yarwood and Shaw (2010) demonstrate. However, our experiences, as fathers (in Nick's case) and as sons, show the reality to be more nuanced than the repeated advertising image. For example, Neil's childhood perception that his father was skilled in building plastic kits ^{was} more idealisation than reality. Nevertheless their shared modelling activities undoubtedly played a role in developing their relationship.

commentary on occupational form

Elsewhere (Pollard & Carver, 2012) we have discussed the widespread perception that modelling is usually a male gendered activity. Our findings do little to dispel this. Firstly, it was our fathers who introduced us, as male children, to modelling. Secondly, as parents, although the range of evidence is limited by the range of actual opportunity, i.e. Neil had no sons, the transmission of skills follows a similar pattern. Nevertheless there are indications in the findings (e.g. Nick did, rather

gendered nature of occupational form - should this come before the previous 3 paragraphs? (social context of the occupational form)

1
2 Page 19 of 32

3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

unsuccessfully, share his modelling with his daughters) and in the literature (see Pollard & Carver, 2012), which undermine any deterministic notion that only men are, or could be, modellers.

Another element of this theme concerns values. While Alcorn (2009) argues that modelling has been a vehicle for transmitting of social values and certain desirable hegemonic attitudes neither of us were conscious of our parents doing this. However, it is hard to imagine the activity being sanctioned if it was not seen by parents (including our adult selves) as 'a good thing'.

The above does not mean that modelling as an occupation for adults is always socially sanctioned. Although there is no research evidence to support this, the idea that adult modelling may be perceived as 'childish' has been asserted by both ourselves (Pollard & Carver, 2012) and Yarwood and Shaw (2010). Neither of us would have revealed our modelling activities to each other, but for a chance remark about Pearson's *Achtung Schweinehund* (2007). This humorous and perceptive autobiographical account alludes to his discomfort as an adult military modeller, and ~~he~~ enabled our study by making the subject 'safe' for us to debate. Also, our recollections showed that both authors needed a personal justification to re-engage with their childhood activity, which revealed our ambivalence about connotations of 'not having grown up' and anxiety about social disapproval. Although as stated a deeper understanding of ourselves was secondary to our goal, a byproduct of this study has been that these private anxieties have resolved through our recognition of a shared occupational experience.

The other theme regarding relationships is more prevalent in relation to adult modelling and concerns how modellers negotiate with partners to accommodate their

no. that's the nature of hegemonic values - they seem 'natural' - eg models is something males do / prototypes are things men are interested in / I think this comment illustrates lack of the critical exploration - you claimed on p. 6. Better to leave this out.

discomfort as a modeller

involvement in activities value of men developing "construction" skills

does not follow on well from paragraph above

this paragraph seems closer to your actual experience than discussion in previous and this page. I think it should come before social positioning of the occupational firm / advertising

URL: <http://mc.manuscriptcentral.com/rocc>

through the bottom of p. 20 URL: <http://mc.manuscriptcentral.com/rocc>

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

modelling activities in shared domestic space. In terms of displaying both layouts and completed models the findings revealed how, for us as children, appropriate spaces were determined by parents, whereas as adults we had to agree these spaces with partners.

This negotiation is a feature of the literature involving how possessions are accommodated in domestic space (Csikszentmihalyi & Rochberg-Halton, 1981; Gregson 2007). The issue is also significant in the railway modelling literature (Andress, 1987; Simmons 1998; Jenkinson, 2001). Our findings concurred with Simmons (1998) suggestion of a variety of spaces which may be favoured and sanctioned, most commonly basements, lofts, spare rooms, garages and sheds. These have been characterised by Yarwood & Shaw (2010, p. 430) as "marginal spaces", i.e. those not normally visited by people outside the household, except by invitation. The significance of this is not fully clear, but may be a further manifestation of the ambivalence felt towards adult modelling.

While our models however were not intended for 'public viewing' the literature shows that others are. Railway modelling, as it requires a layout, is more demanding of space for display than model aircraft. Andress (1987) and Jenkinson (2001) described examples of modellers whose railway dioramas have spread along the family dining room wall or have overtaken the garden.

Our diaries were less concerned with where our models were actually built or the interpersonal consequences of, for example, leaving uncompleted kits on the kitchen table. It is possible that one reason for this not being mentioned is that many construction tasks are transitory and may take place when a partner is absent, but a layout or a completed model has greater permanence. As a footnote, it's worth

1
2 Page 21 of 32
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

noting that modelling literature discusses the importance of safety issues (e.g. ventilation) in the choice of room in which to engage in model construction (Stanton, 2002).

OK - back to societal view

From a historical and occupational ~~domain~~ ^{work} perspective, our findings mainly discuss modelling from plastic kits and manufactured items supplied with instructions at a time when these products had recently become widely available and affordable. In this sense our modelling reflects the recognised shift from scratch and craft modelling to the purchase and assembly of the model as a commodity (Butsch, 1984). Butsch also suggests that through this commodification, modellers (mainly males) have become deskilled passive consumers, caught up in a wider capitalist process that has discouraged their innovation and disrupted the transmission of 'traditional' and tacit skills such as woodworking. (Butsch, 1984).

*discussion - reminds me of Dickens
discussion of creativity within quilting blocks - did you
consider that 30s article as a reference point?*

While this thesis has some appeal, we consider that it appears to be overstated at least in relation to skill. Our findings show how we frequently made our own, and even invented modifications of the kits we have bought in an active process rather than passively following instructions. This skilled use of convenient or found materials in modelling has been termed "bricolage" (King, 1996, p. 71) and was the aspect of model making which we most valued. So if some skills have vanished, then new forms of occupation within modelling have appeared.

Our findings revealed that the different subjects we modelled offered very different creative opportunities, for example, for bricolage. There are significant differences between the modelling of static aircraft and railway modelling. As Harrington (2012, p. 20) has pointed out, "railway modelling, more than any other form of model-making, allows the modeller to recreate reality in microcosm". It is this re-creation, that of a

is this consistent with the definition of occupational form given earlier?

much the same discussion as the 3rd paragraph on p. 20 - layout / space

moved away from

layout or diorama that offers greater scope for innovation, giving working model trains meaning and context. Neil found it much harder to bring 'life' to his static models even when positioned on a stand as if in flight.

seems to follow on well from 'skill/bridologie' 2 paragraphs back

The opportunities for innovation allowed Yarwood and Shaw (2010) to discuss railway modelling as an activity of the "craft consumer" who in fact does "both design and make the products" that he himself consumes (Campbell, 2005, p. 24). While it is less clear that the building of plastic kits meets these criteria, we have shown that building preformed kits does not necessarily mean that the modeller-as-consumer is an uncritical 'dupe' (Campbell, 2005) or indeed, totally deskilled.

with: have given rise to the concept of (Yarwood & Shaw, 2010)

Even accepting this argument, it is undeniable that as children the pattern of our modelling interests was to some extent determined by the modelling industry as an occupational domain. Our findings show that our early experiences of modelling appeared to be, at least in part, the products of socialisation and also took place at a time in which youth were an emergent market. It has been recognised that at this time model manufacturers rapidly became sophisticated at developing age-specific products to widen the age-range of the market and to socialise people into the hobby as early as possible (Tri-ang Railways, 1962; Ward 1999; 2004; Yarwood & Shaw, 2010). In this sense it might be said that while we were making Airfix™ kits, in some small way Airfix™ were also making us.

not sure what you mean by 'the pattern'

As adult modellers we have tended to write of our experiences as if they resulted from purely personal choices. However, we also acknowledge, following Butsch (1984) that the range of available choice is determined by the market. It could even be argued that where we have made innovations, such as modification of the diesel model that Nick described, these are only possible because they take advantage of

these what? choices?

back to socio-cultural commentary - marketing

socio-political

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2 Page 23 of 32
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

so, maybe place claims in this paragraph with previous discussion of wellbeing

manufactured components. Indeed, as Butch (1984) would probably argue, from a Marxist perspective our 'choices' are illusory and could be better described as examples of "pseudo individualisation" (Horkheimer & Adorno, 2002, p. 445) since they ultimately begin with the purchase of a product.

This discussion began with a recognition that the occupation of modelling may contribute to personal wellbeing, in the same way as other craft activities such as knitting and quilting have been reconsidered as occupational therapy interventions (Riley, et al., 2013). The occupational forms of model making discussed here have been overlooked in occupational science and in occupational therapy literature:

Occupational therapy is a predominantly female profession in which male gendered activities receive less mention (Pollard & Carver, 2012). We think there may be is worth in further exploring the possible benefits of model-making activities as engaging fatherly occupations. There is the potential for the incorporation of modelling into programmes as a vehicle for including men in wellbeing projects, such as Men in Sheds (Ormsby, Stanley, & Jaworski, 2010), or similar community based projects. This article has provided a description of the activity and its value which may help non-modellers to generate such projects.

Limitations

This work has several limitations. Firstly, although modelling has been depicted as a wide-spread human activity (King, 1996; Pollard & Carver, 2012), the particular forms of modelling here are historically located in a specific culture. The authors are products of their time and as baby boomers that time may well have passed. Modelling and its socioeconomic context has changed in many ways since our youth. For example the development of on-line shopping has led in part to the decline of the

same critique has been made within OS - please reference OS

Given to be used

men's

occupation

don't think you need this claim

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

model shop itself, which has literally, in one case, become a museum piece, as a recreated full-size shop exterior in Scotland's National Museum of Flight.

Many of our experiences seem to show us as 'typical' modellers of this era, particularly in that we are male. On the other hand we are unusual in being able to take advantage of our position in academia to exercise a reflexive approach towards modelling (rather than simply enjoying it). In the tradition of autoethnography we make no claims to generalisability. Further research would need to explore the views of those experiences of different ages, gender and cultural backgrounds to meet the parameters identified by Hocking (2009) as necessary for full in-depth description of human occupations.

Finally as in all autoethnographic accounts there is the possibility that we may have unconsciously censored our own narratives. Alternatively we may have colluded in avoiding potentially emotive material or issues that might have affected our relationship or our relationships with others. In retrospect the involvement of a third party to identify omissions or possible contradictions in our accounts may have been useful.

Conclusion

While somewhat axiomatic this article has shown that, in any work on modelling the 'devil is in the detail'. While there are similarities in the experience of making static kits of planes and working trains and layouts there are significant differences for the modeller, partly resulting from the nature of the prototype modelled and the fact they are built to be kept. Nevertheless our account of modelling has shown it to be a significant, beneficial occupation to modellers and is a component of their occupational engagement with the world (Rebeiro & Cook 1999). Like textile crafts

(Pöllänen, 2015), modelling merits further exploration alongside other hobbies and leisure activities "that occur, unmonitored, in private spaces" (Yarwood & Shaw, 2010, p. 425). This would increase ^{its} our understanding of both the occupations of modelling and ^{at form} their potential benefits to wellbeing.

References

Alcorn, A. L. (2009). *Modeling behavior: boyhood, engineering, and the model airplane in American culture*. (unpublished PhD thesis). Case Western Reserve University. Retrieved from:
https://etd.ohiolink.edu/!etd.send_file?accession=case1220640446&disposition=inlin
 e

Andress, M. (1988). *PSL complete guide to model railways*. London: Guild.

Baker, N. (1997). Model airplanes. In N. Baker (Ed.), *The size of thoughts* (pp. 27-35). New York: Random House.

Bull, J. (2009). Watery masculinities: fly-fishing and the angling male in the South West of England. *Gender, Place & Culture, A Journal of Feminist Geography*, 16(4), 445-465.

Burnier, D. (2006). Encounters with the self in social science research: A political scientist looks at autoethnography. *Journal of Contemporary Ethnography*, 35, 410-418.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

space between initials

Burt, E.L. & Atkinson, J. (2012). The relationship between quilting and well being. *Journal of Public Health*, 34(1): 54-59.

Butsch, R. (1984). The commodification of leisure: The case of the model airplane hobby and industry. *Qualitative Sociology* 7(3), 217-235.

Caldwell, L.L. (2005). Leisure and health: why is leisure therapeutic? *British Journal of Guidance & Counselling*, 33(1), 7-26

lower case

Campbell, C. (2005). The Craft Consumer: Culture, craft and consumption in a postmodern society. *Journal of Consumer Culture*, 5, 23-47.

Clatworthy, J., Hinds, J., & Camic, P.M. (2013). Gardening as a mental health intervention: a review. *Mental Health Review Journal*, 18, 4, 214-225.

18(A),

Csikszentmihalyi, M., & Rochberg-Halton, E. (1981). *The meaning of things: Domestic symbols and the self*. Cambridge: Cambridge University Press.

Dickie, V.A., & Frank, G. (1996). Artisan occupations in the global economy: A conceptual framework. *Journal of Occupational Science*, 3(2), 45-55. doi?

Australia

Dickie, V.A. (2003). The role of learning in quilt Making, *Journal of Occupational Science*, 10(3), 120-129. doi?

1
2 Page 27 of 32

Journal of Occupational Science

27

3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Dickie, V.A., Cutchin, M.P., & Humphry, R. (2006). Occupation as Transactional Experience: A Critique of Individualism in Occupational Science. *Journal of Occupational Science*, 13(1), 83-93.

Ellis, C., Adams, T.E., & Bochner, A.P. (2011). Autoethnography: An overview. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 12(1) Article 10.
Retrieved from: <http://www.qualitative-research.net/index.php/fqs/article/view/1589/3095>

Foster, K., McAllister, M., & O'Brien, L. (2006) Extending the boundaries: Autoethnography as an emergent method in mental health nursing research. *International Journal of Mental Health Nursing*, 15, 44-53.

Freadman, R. (2004). Decent and indecent: Writing my father's life. In J.P. Eakin (ed.), *The ethics of life writing*, (pp121-146). Ithaca NY: Cornell University Press.

Gregson, N. (2007). *Living with things: ridding, accommodation, dwelling*. Sean Kingston Publishing: Wantage.

Harrington, R. (2012). *Miniature railways and cultural microcosms: railway modelling in Britain, c1900-c.1950*. Retrieved from: www.artificialhorizon.org/essays/pdf/modrlys.pdf.

Harkin, J., & Huber, J. (2004). *Eternal youths: How the baby boomers are having their time again*. London: Hendeys Banks.

27

URL: <http://mc.manuscriptcentral.com/rocc>URL: <http://mc.manuscriptcentral.com/rocc>

Hocking, C. (2008a). The way we were: Romantic assumptions of pioneering occupational therapists in the United Kingdom. *British Journal of Occupational Therapy*, 71(4), 146-154.

Hocking, C. (2008b). The way we were: thinking rationally. *British Journal of Occupational Therapy*, 71(5), 185-195.

Hocking, C. (2009). The challenge of occupation: Describing the things people do. *Journal of Occupational Science*, 16(3), 140-150.

Horghagen, S., Josephsson, S., & Alsaker, S. (2007) The use of craft activities as an occupational therapy treatment modality in Norway during 1952–1960. *Occupational Therapy International*, 14(1), 42–56

Horkheimer, M., & Adorno T.W. (2002). *The dialectic of enlightenment: Philosophical fragments*. (Edmund Jephcott Tr. Stanford: Stanford University Press.

Hornby, PLC. (2013). Annual report and accounts 2013. Retrieved from:

<http://online.hemscottir.com/ir/hrn/pdf/ar2013.pdf>

Howell, D., & Pierce, D. (2000). Exploring the forgotten restorative dimension of occupation: Quilting and Quilt Use. *Journal of Occupational Science*, 7(2) 68-72.

3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Huang, L., & Shi, H. (2015). Keeping up with the Joneses: From conspicuous

consumption to conspicuous leisure. *Oxford Economic Papers*, 1-14,

doi10.1093/oep/gpv021. Retrieved from

<http://oep.oxfordjournals.org/content/early/2015/03/04/oep.gpv021.full.pdf+html>

Jenkinson, D. (2001). *Historical railway modelling*. York: Pendragon.

King, J.R. (1996). *Remaking the world, modeling in human experience*. Urbana, IL:

University of Illinois Press.

Lapadat, J.C. (2009). Writing our way into shared understanding: Collaborative autobiographical writing in the qualitative methods class. *Qualitative Inquiry*, 15, 955-979.

Lapadat, J.C., Black, N.E., Clark, P.G., Gremm, R. M., Karanja, L.W., Mieke, M., & Quilan, L. (2010). Life challenge memory work: Using collaborative autobiography to understand ourselves. *International Journal of Qualitative Methods*, 9(1), 77-104.

Lauwert, M. (2008) Playing outside the box - on LEGO toys and the changing world of construction play. *History and Technology*, 24(3), 221-237.

Marriott, R. (2012). *Meccano*. Oxford: Shire.

Nelson, D., & Jepson-Thomas, J. (2003). Occupational form, occupational performance and a conceptual framework for therapeutic occupation. In P. Kramer, J.

Hinojsa, & C. B. Royeen (Eds.), *Perspectives in human occupation, participation in life* (pp. 87-155). Philadelphia, PA: Lippincott Williams & Wilkins.

Office of National Statistics, (2012). *2011 Living costs and food survey*, Chapter 1 Overview. Retrieved from: http://www.ons.gov.uk/ons/dcp171766_285895.pdf

Ormsby J., Stanley, M., & Jaworski, K. (2010). Older people's participation in community-based men's sheds programmes. *Health And Social Care In The Community*, 18(6), 607-613.

Pearson, H. (2007). *Atchung schweinehund, a boy's own story of imaginary combat*. London: Little, Brown.

Pollard, N., & Carver, N. (2012). Models and human occupation. In N. Pollard, D. Sakellariou, (Eds.), *Politics of occupation-centred practice, reflections on occupational engagement across cultures*, (pp. 180-196). Oxford: Wiley.

Pöllänen, S. (2015). Elements of Crafts that Enhance Well-Being: Textile Craft Makers' Descriptions of Their Leisure Activity. *Journal of Leisure Research*, 47(1), 58-78.

Rebeiro, K.L., & Cook, J.V. (1999). Opportunity, not prescription: An exploratory study of the experience of occupational engagement. *Canadian Journal of Occupational Therapy*, 66(4), 176-187.

3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Reed, K., Smythe, L., & Hocking, C. (2013). The meaning of occupation: A hermeneutic (re)view of historical understandings, *Journal of Occupational Science*, 20(3), 253-261. doi

Riley J. (2008). Weaving an enhanced sense of self and a collective sense of self through creative textile-making, *Journal of Occupational Science*, 15(2), 63-73. doi

Riley, J. (2011). Shaping textile-making: Its occupational forms and domain, *Journal of Occupational Science*, 18(4), 322-338. doi

Riley, J., Corkhill, B., & Morris, C. (2013). The benefits of knitting for personal and social wellbeing in adulthood: findings from an international survey. *British Journal of Occupational Therapy*, 76(2), 50-57.

Royal College of Psychiatrists, (2010). No health without public mental health: the case for action. London: Author.

Simmons, N. (1998). *Railway modelling* (8th ed.). Sparkford: Patrick Stephens.

Stanton, M. (2002). *Scale aircraft modelling*. Ramsbury: The Crowood Press.

Suto, M. (1998). Leisure in occupational therapy. *Canadian Journal of Occupational Therapy*, 65(5), 271-278.

Tri-ang Railways. (1962). *The first ten years...* Margate: Author.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Yarwood, R., & Shaw, J. (2010). 'N-gauging' geographies: craft consumption, indoor leisure and model railways. *Area*, 42(4), 425–433,

Ward, A. (1999). *Airfix: Celebrating 50 years of the greatest plastic kits in the world*. London: Harper Collins.

Ward, A. (2004). *Classic kits: Collecting the greatest model kits in the world, from Airfix to Tamiya*. London: Harper Collins.

Ward, A. (2009). *The boys' book of Airfix: Who says you ever have to grow up?* London: Random House.