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A Collector's Item: Hildred Bigwood's Herbarium

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Abstract

Miss Hildred Bigwood (1921-2000), when I first knew her in the 1970s, was the botany technician in the biological sciences department at the University College of Wales, Aberystwyth. She was also a plant collector. Her life's work was the creation of a remarkable herbarium that proved controversial when its final 'home' had to be settled. This paper problematises two methodological difficulties: writing an incomplete and yet justifiable biography when data are missing, and the ethical dilemmas posed by writing about a dead friend who is unable to give consent. Lives are entangled with other people and other things. Glimpses of a life, collected from other people's memories offer insights but fail to provide descriptions free from distorting otherness. Tangible, supporting evidence: documents, photographs, and artefacts provide more definite biographic details. Such entanglements are messy but need to be exposed and analysed for what they are. There is one more social complication that threads its way through this biography, and that is the position of women within the university, complicated by notions of academic and hegemonic claims to scientific worthiness.

Keywords

Plant, Collecting, Science, Women, Biography, Friend, Dilemma

Figure 1 Hildred Bigwood[1]

Introduction

Biographic research has both '*general* and *specific* purposes' as suggested by Erben, because 'individual lives are part of a cultural network, biographical research will relate to an understanding of the wider society' (1998: 4). This paper *specifically* focuses on Miss Bigwood's passion for plant collecting. In a previous biographic paper, I argued that 'distance from the subject allowed greater freedom for critical analysis, but simultaneously diminishes veracity' (Page, 2015: 78). This is because the authorial self not only engages with the living person but now frames the whole biographic process by reliving, albeit through (fallible) memories, various episodes in their lives. This introduces layers of distortion and bias at several levels as data are collected, selected, and interpreted. Ammon urges sociologists to acknowledge the differences between the 'process of discovering insights and a justification of the knowledge gained' (2011: 4). However, in persevering with the processes and acknowledging the associated difficulties inherent to what we come to 'know', I will endeavour to produce a coherent and compassionate epistemology describing Hildred's life's work and lay open to scrutiny the impasse posed by assembling patchy evidence relating to her more *general* social and cultural positioning.

The hypothetical questions in this paper are focused on the personal, social, and institutional context of Hildred's life and how these can be theorised in a broader system of meaning-making (Mohr *et al.*, 2020). Using aspects of Hildred's biography will illustrate the general milieux in which she lived and worked, thus positioning her within a social and professional hierarchy.

The Biographic Gateway

When I first met Hildred, I was an undergraduate at UCW reading zoology. But as the years went by, 'Biggie', as she was affectionately known, became a friend. The first thing that united us in friendship was our dogs: she with her Border Collies, and I with a rescued Pembrokeshire Corgi. Perhaps it was also something to do with there not being many women in the biology department, students, or staff. Some years later, Hildred was 'maid of honour' at my wedding (Figure 1), and we continued to write and visit each other until her death at the turn of the millennium.

'Biggie' lived in a small, isolated cottage in West Wales (Figure 2). She had a beautiful garden and a greenhouse full of unusual cacti and succulents. Her home was furnished with a collection of Jacobean furniture (some of it genuine). She had many paintings, mostly watercolours of Scottish scenes with hairy Highland cattle grazing beside lakes on picturesque mountainsides. There were a great many books but no television. Her cottage had stone floors and a large inglenook fireplace, complete with a traditional bread oven, but Hildred never liked cooking. Her kitchen was minimalist, and the foods she prepared for herself were simple and frugal.

Figure 2 Hildred's cottage in Llanfihangell y Creuddyn 1979[2].

The photograph (Figure2) was taken by Andrew Agnew (my husband's PhD supervisor in the Botany department[3] and Hildred's friend). He wrote to me recently saying that 'Hildred was a collector's item in many ways. Very opinionated, independent, and dismissive of locality…. when touring Britain looking for flora she slept in her van with two dogs, one constantly barking, …[but] she was excellent at providing floral material for [university] practical's.' These descriptors of her being opinionated and independent were certainly appropriate, but I would add that she was well known for being a rather reclusive eccentric with a contagious sense of humour and a raucous laugh.

Wherever Hildred was, so too were her dogs. 'Biggie' usually took her dogs to work, on field trips, and when she went on holiday. Figure 3 shows Hildred on one of her visits to me in Hampshire shortly after I had moved from Wales. Notice her usual garb of a serviceable tartan kilt and jumper.

Figure 3 Hildred with Chloe and Carlo when visiting us in Hampshire[4]

Hildred was genteel and 'lady-like' in the old-fashioned sense of this expression. She expected good manners from everyone, even young children, and would remonstrate with anyone falling short of these expectations. She was a subscriber to 'The Lady', a women's magazine that has been in publication since 1885. From the few editions that I looked through when visiting her, I recall its tone being well-suited to Hildred's interests and ideas. Hildred and I would sometimes sit together in the evening, drinking hot cocoa and eating digestive biscuits, discussing what the latest edition had brought to her attention.

Of course, on reflection, I wish I had focussed those conversations to get her to tell me more about her past life. But at that time, I had no inkling that her personal history would ever become the subject of my research. Hildred talked freely enough about her past and told me that she had lodged her papers relating to her time in the land army with the Imperial War Museum. I have latched on to this gift of documentary evidence to suggest that it implicitly gave permission for her life to be investigated. Hildred must have realised that by giving her documents to a museum, someone would be reading them at some future date. Although I doubt she ever thought that it would be me!

It was during one of her visits to my home in Hampshire, when Hildred, her dogs and I were walking along a nearby canal tow-path, that she spotted some Orange Balsam growing near the water's edge on the far bank. It was beyond our reach, but she thought that if I were to lie down, I would be able to stretch myself out and, with the aid of her walking stick, pull up some of the Balsam without falling into the water. It almost worked; I did get a chunk of Balsam, but I also got very wet. It is worth noting that the plants I grabbed hold of on that day are not those in the herbarium (see Figure 4), thus demonstrating the difficulties associated with collecting and preparing herbarium specimens.

Figure 4 Impatiens biflora, Exmouth, 1976[5]

Hildred collected plants wherever she went: 2650 specimens in all! Her collection was mostly British flowering plants, of which '32 specimens are rare or endangered, and there were 76 specimens of non-flowering plants, including ferns, clubmosses, horsetails and one alga ... In Europe, Miss Bigwood had collected in several countries, including France, Greece, Norway, and Switzerland' (Atkinson, 2001). This collection is now in the National Museums of Liverpool, and I am pleased to say that another 371 specimens have been digitised and put online by the Botanical Society of Britain and Ireland (BSBI, 1999[6]).

It is the relationship between Hildred painstakingly collecting her specimens and how her herbarium came to be located in Liverpool that forms the pivot around which this paper addresses the issue of missing data and the ethics of writing about a deceased friend. Hildred insisted that her herbarium collection be kept intact: this was important both as a scientific and socio-historical record of her collecting. Several organisations were keen to have some specimens from her collection to add to their herbaria, but it was difficult to find somewhere that could look after the complete collection. Herbarium maintenance requires professional expertise, particularly for the conservation and public display of specimens. The number of organisations able to undertake such work is, unfortunately, rapidly decreasing (Deng, 2015). No wonder it was difficult to find a home for Hildred's herbarium until it was finally accepted by Liverpool.

Before we consider Hildred's work on her herbarium in more detail, it would be relevant to briefly review the role of women within university science departments at that time. As I said before, there were very few women in the department; when I got to my final year at university, I was the only woman reading my subject (animal ecology), and throughout the university, women were generally outnumbered by men in the ratio of 10:1. This is not the place to consider gendered *gravitational support*: a drifting towards each other as an antidote to the low levels of societal sexism prevalent at that time, but for more detail see Oakley, who gives a vivid description of universities as 'inhospitable' places for women (2005: 188).

Undoubtedly, the feminist counter-hegemonic arguments were in circulation during the 1970s, but the day-to-day reality for women in a science department was such that our attention was focused on our work. I was not unaware of sexism; it was a constant irritating nuisance, but at the time, I was ill-prepared to challenge it. As Trudy Elion, the 1988 Nobel Prize winner for medicine, said, 'I hadn't been aware that there were doors closed to me until I started knocking on them', and neither was I. But I now know that this was the reason I had so much trouble convincing some tutors to accept me on their courses. In hindsight, I think my friendship with Hildred was based, in part, on her office being a safe place for two women to hide and chat, and her sense of humour was the right kind of support I needed to survive the 'legacy of an establishment that's just beginning to recover from centuries of entrenched exclusion and prejudice' (Saini, 2017). In the interest of balance, I should also say that some of my tutors were kind, supportive and very helpful.

Herbaria Histories

It was Carl Linnaeus, inventor of the binomial system of plant classification, who said, 'A herbarium is better than any illustration: every botanist should make one' (Frangsmyr, 1983: 143). Creating herbaria requires detailed botanical know-how, as well as the skill and patience to find, dry, mount and annotate each specimen according to what, when and where it was collected. All in all, a very time-consuming and painstakingly fiddly task. The first documented herbarium was accredited to Luca Ghini in Pisa, Italy, in 1544.

The first woman in the UK known to have created an important herbarium was Mary Somerset, Duchess of Beaufort (1630-1715). Although she began by drying her own garden flowers, she later employed plant hunters who added to her collection. The Beaufort Myrtle, *Beaufortia decussate*, was named in her honour (Sims, 1815). Her 12-volume herbarium is now in the Natural History Museum in London (McClain, 2001).

Other notable women herbarium collectors were Florence Nightingale (1820-1910), who collected plants from her own gardens and later, from the Crimea (Mendelson, 2008) and Margaret Bentinck, the Duchess of Portland (1715-1785), who corresponded with the philosopher Jean-Jacques Rousseau about his '*Petit Herbier pour Mademoiselle Delessert*' (1772).

Rousseau considered botany a suitable occupation for a lady, and women with enough leisure time and wealth were encouraged to occupy themselves with the refined tasks of plant collecting, and some made impressive herbarium collections.

William Hooker, Joseph Banks, and William Bromfield all had significant herbarium collections that they amalgamated to create the herbarium in Kew Gardens, London, in 1852. We can immediately see that while women were encouraged to 'amuse' themselves with botanical study, it was thought that anything that looked like a serious scientific endeavour could only be undertaken by men. I am reluctant to speculate at this point, but I do wonder if Hildred's herbarium had been compiled by an accredited male scientist instead of a female 'amateur', then its value might have been recognised sooner, and the ensuing controversy avoided.

The War Years

This paper is not the place to discourse at length upon gender inequalities dominant in centuries past and the exclusion of women from institutions of scientific learning, and yet such sexist, elitist attitudes prevailed and trickled through time to affect the career choices made by many pre- and post-war women. When Hildred was growing up in the Midlands, women were not allowed to own property, serve on a jury, or have their own bank account. During the Second World War however, women were called upon to undertake work that had been done by men who had gone into the armed forces, such as driving, factory work and engineering. Hildred joined the Women's Land Army in 1941 (e.g. Figure 5) and continued with this work until the war ended in 1945. She was sent to work on 'mixed and dairy farms in Warwickshire, Shropshire, and Shrewsbury. Her duties included cider-making, rat and mole catching, as well as field and dairy tasks' (Imperial War Museum).

Figure 5 Members of the British Women's Land Army harvesting beetroot (circa 1942/43).[7]

It is through exploring the 'range of other possibilities' drawn from other people's biographies that we may begin to develop a better understanding of the background of Hildred's life during her war years. Looking at the photograph of some land-army women harvesting beets offers us a glimpse of what Hildred *may* have been doing, even though she is not in this picture (Appadurai, 2014: 66). Some may argue that this now transcends pure biography and drifts into fiction, but I will argue that it adds a layer of richness, adding *possible* descriptive details to Hildred's circumstances.

After the war, there was a general expectation that girls would marry and be provided for by their bread-winning husbands. This was reinforced by law, requiring most women to stop working upon getting married (there were some exemptions). It was not until 1977 that the UK marriage bar was finally abolished. Hildred never married and, therefore, needed to work and was legally able to do so.

Hildred at Work

Hildred never told me when she became interested in Botany, except for one anecdote about her childhood when her father allowed her a corner of the garden to grow some flowers. By the time I got to know her, she was already a competent field botanist.
In addition to her work at the university, Hildred was a plant collector and recorder for the Shropshire Botanical Society and the Botanical Society of Britain and Ireland, and she also had connections with the West Wales Naturalist's Trust. When Hildred retired from

work at UCW in 1981, she moved to another isolated cottage in Gladestry, close to Offa's dyke, and continued plant collecting until she was admitted into a nursing home in Lyonshall, where she eventually died.

In order to appreciate the quality, beauty and scientific significance of her plant collection, I include another specimen from Hildred's collection (Figure 6), which I hope readers will find delightful as well as sociologically and scientifically interesting. Botanists can appreciate the care with which each morphological detail has been displayed; taxonomists will be impressed by the accurate classification of each plant; ecologists and socio-historians will be pleased with the location descriptions, and everybody can appreciate the beauty of the specimen. I have to add one cautionary note: the plant names used throughout this paper are historically correct but may now have changed with advances in DNA profiling, resulting in some plant names being reassigned. Orange balsam or Jewelweed, for example, already described as *Impatiens biflora,* is synonymous with *Impatiens capensis* (IPNI 2022).

Figure 6 Field woundwort (Stachys arvensis). 1973. Llanfihangel-y-Creuddyn.[5]

Making the Herbarium

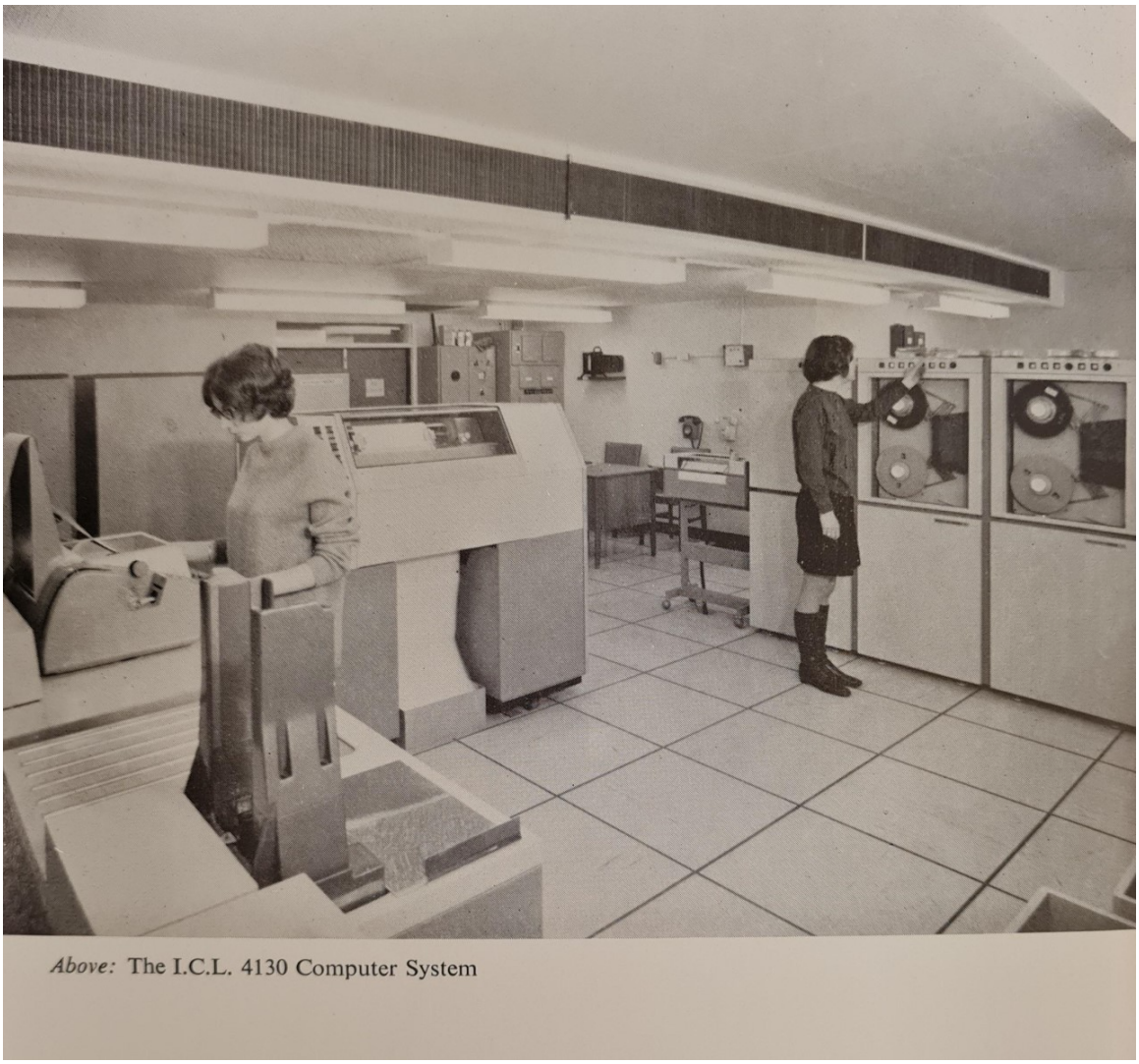
First of all, 'Biggie' had to go into the field to collect her specimens, knowing exactly what grew where. This involved identifying species and noting the location on a map [there was no GPS at that time]. She would then have had to carefully bring her samples home without damaging them and put them into a flower press. This task may sound simple, but it involves carefully placing plants on blotting paper to show their salient features

without damaging any delicate flower parts and then sandwiching these between more paper and cardboard and pressing under weights for several weeks. When the plants were fully dried, they were pasted onto card and finally covered in a protective film. Each plant had to be labelled with its scientific and common names, the name of the collector, the date and the precise Ordinance Survey Map Grid location where it was found, and finally, the label was signed.

The Digital Herbarium

Today, part of 'Biggie's' herbarium is available online, but I doubt that Hildred could have conceived of such innovations, making her life's passion readily available worldwide. Hildred was not a lover of computers, and in her day, a computer was a monster machine!

In the 1970s, the Aberystwyth mainframe computer took up one floor of the university's computer building, attended by a small army of people in an air-conditioned room (Figure 7). There was, however, a rather low-tech system of knowing when the computer was down for maintenance, a large red card was displayed in the window.



Above: The I.C.L. 4130 Computer System

Figure 7 Aberystwyth University's Computer[8]

‘The Bigwood Herbarium- the Final Bequest’

‘In January 2000, Liverpool Museum Herbarium (**LIV)** acquired the herbarium of the late Miss Hildred Bigwood. It was apparent from the collection that Miss Bigwood had been a keen botanist. The specimens were, on the whole, mounted and fully labelled, and the majority were identified to species level. We actually accessioned over 2650 specimens in total, a great many of which were non-British.

According to Flora Europaea, Turkey and the Greek islands of Kos and Kalymnos all lie outside of the boundary dividing Europe from the Orient. As Miss Bigwood had collected in these areas, we were also able to add just over 100 new specimens to our extra-European herbarium.

It was Miss Bigwood’s wish that her collection would not be split up between different institutions, and we have now incorporated all of the material into our collections. Unfortunately, she died before her herbarium found its home at LIV.’ (Atkinson, 2001)

The Conflict

An epistemological conflict arises from the use of tangible data, such as photographs and legal documents, as opposed to the collection of intangible and less reliable memories and anecdotes. Right at the start of this paper, I suggested that everyone’s lives are entangled with other people’s lives, but I also recognised the fallibility of memories when we try to recall those lived episodes. The result is a series of stories, and while I acknowledge that each of them is authentic and gives readers a rich impression of Hildred, it is impossible to vouch for their reliability. However, accumulated evidence has greater value and thereby justifies the storytelling. This is an ideographic approach to research coupled with authorial evaluative judgment and, therefore, clearly addresses the purposes of this paper and answers the hypothetical questions raised therein.

With these difficulties in mind, I would like to relate several stories involving Hildred, gleaned from various people who knew her well. One such amusing incident occurred in the postgraduate botany laboratory while Hildred was still working as a technician there. There were several PhD students at that time working on a variety of projects, my future husband being one of them. Totally unrelated to their work but doubtless of some importance to them was the brewing of beer in a large container at the back of the lab. Stupidly, they had not included a release valve to relieve the pressure caused by carbon dioxide building up during the brewing process. It was unfortunate that Hildred walked into the laboratory just at the moment when this pressure became too much, and the bung shot out, followed by a stream of warm beer. The now beer-soaked Hildred ran screaming from the lab, her alarm increased by the idea that she had just been drenched in some nasty, toxic chemical. Although she was eventually reassured that she was in no danger from what she could now smell and clearly identify as beer, she began to screech with laughter while demanding that the mess be cleaned up immediately.

Dr Agnew, in another anecdote, describes Hildred’s first flight in an aeroplane, ‘She had never flown! I took her on her first field course to Portugal; on take-off, she leaned forward, head in hands, and moaned loudly. The cabin lady blamed me! Thereafter, there was no stopping her, and she went to Greece, Italy and Spain.’ As we know from the herbarium collection, Hildred then travelled widely throughout Europe and just beyond, collecting specimens wherever she went.

Every autumn, while I still lived in Wales, Hildred and I would go foraging in the hills surrounding her home. We would look for edible fungi (something I had done since childhood), hazelnuts, sheep’s wool caught up on fences and hedges (it makes excellent

stuffing for cushions), blackberries, and hedgerow herbs. Hildred brewed her own wines from dandelions, rosehips, blackberries and other fruits and flowers that she collected, and they were excellent. Hildred and I also went to a lace-making teacher to learn how to make 'Cluny lace'.

How, then, to Describe Hildred?

Hildred's strengths lay in her botanical abilities: she was an accomplished field botanist. She lived a rather reclusive life, shared with her dogs, and enjoyed the company of a few close friends. But there were a great many contradictions about her as well. At a practical level, she did not like cooking, and yet she made remarkably good country wines. Her home was comfortable and decorated in an elegant and old-fashioned style. She usually wore her serviceable tartan kilts that she had made especially for her by a firm in Scotland. Her hair was typically tied back, somewhat untidily, but when she attended my wedding, she surprised all of us by dressing smartly. She certainly loved her dogs, and they were always her close companions, even during her final weeks in a nursing home, when they were brought to her bedside every day by a kind nurse who undertook to look after them during Hildred's last illness.

Obviously, she lived a simple and frugal life. But do we have enough information to capture the essence of who Hildred actually was? Did I know her well enough, or was my relationship with her just one of many, and was the connectedness that I felt with her biased towards what I thought important rather than reflecting the meaning of Hildred's life? Was this also true of the other relationships that have informed this account? It is incumbent upon researchers to question this interplay between themselves, their subject, their context, and all relevant social interactions. This interplay inevitably results in a co-mingling of auto/biographies.

These pertinent questions challenge both the ethics and methodology of narrative biography. As Wiesenthal explains, 'there is a tension between the constructed and subjective nature of biographical "truth" on the one hand, and an awareness of life stories that seem to demand… a firm insistence on their non-fictionality, on their historical actuality as "things done", however complicated those claims might be' (2006: 63).

Compassionate Epistemology Versus Critical Analysis

This paper sought to describe Hildred Bigwood's life in sufficient detail to enable readers to appreciate 'Biggie's' rather eccentric character and the dedication she gave to her life's passion for plant collecting and the creation of her herbarium. The evidence put forward has been patchy: there is the herbarium collection itself, some photographs, a few letters and documents, and, of course, a collection of memories drawn from various people who knew her; this was her historical actuality, her 'things done'.

A critical analysis would question whether the evidence given here was sufficient to detail Hildred's life and work. The documents are sparse: Hildred's life during the war, her birth and death certificates, and her employment record. The photographs I gathered showed Hildred at work, at home, visiting us, and at my wedding, very different aspects of her life, but nevertheless, literally snapshots in time with huge gaps unaccounted for in between. 'Biggie's' herbarium clearly details when and where she travelled and also demonstrates the skill and patience required to make such a worthwhile plant collection. The memories collected from people who knew Hildred create a problem in that all relationships, when recounted to others, are prone to post-hoc rationalisation and, of course, distortion, no matter how factual one tries to be.

I am acutely aware that I have strayed from Hildred's historical actuality by incorporating things that *may* have been done by her. It is in this way that biographers can reflexively add to what they know, its truth and the relationship to the reality they seek to describe. Such additions challenge the conventional norms associated with the idealised notions of objective truth and simplistic evidence gathering (Hegelund, 2005). A compassionate epistemology accepts this patchy evidence, filling gaps with contextual details drawn from alternative sources, transposing richer descriptions from other, similar contexts, and adding verisimilitude to Hildred's story.

Does this strategy transgress pure biography by drifting into fictionality? Such stories help to understand Hildred from the descriptions given while embedded in detailed background material collected from elsewhere, providing some historical detail of things that she *might* have done. Every reader will see different aspects of Hildred; they will filter these stories and pictures through the lens of their own experiences. No matter how faithful to the subject we are in writing a biography, it is impossible to do so without the messy entanglement of our own contextual judgement as it touches that of the person we are describing and the jumble of other lives involved in its telling, and then further complicated by those who are reading the story. A truly postmodern complication of multiple physco-social-self-locations and messy relationships.

If the reader now has a better understanding, albeit incomplete, of Hildred, her character, her love for her dogs, and her dedication to plant collecting, then this work was sufficient to accomplish its aims. On the other hand, as a critical analysis of the evidence would acknowledge, there are gaps. The question this paper now asks of all biographers is: how much accumulated evidential data do we really need to write convincingly? The answer involves the adoption of meta-systems of analysis, multiple perspectives, and acknowledging everyone's situational subjectivity as well as the reader's judgments and perspectives.

The Ethical Dilemma

The immediate ethical problem posed by this research is the dichotomous relationship between myself as 'Biggie's' friend and me as the author of this paper. Friendship does not disbar writing a biography, but it is impossible to create an objective distance along which research proceeds unless one takes into account the decades since Hildred's death. Death poses another ethical issue in that it was impossible to ask for Hildred's permission to write about her or to use her life and work to illustrate the social and scientific problems associated with her herbarium. Hildred was a private person, always choosing to live in isolated locations, shunning any form of publicity, and yet I have had the audacity to promote her work and, through this, exposed her as an interesting character. Have I valorised her work or betrayed our friendship by 'stealing' her story? (Page, 2009). Is this an example of my habitual moral stance being subsumed by ethically questionable research performance? Polanyi (1964) would describe this position as 'obliquity', where I now have to stand to one side of my normative moral positioning. Resolving this quandary remains problematic for me still.

Various authors have considered friendship relationships when writing biography. Most took the ethnographic or anthropological stance of being in the field with their friends-as-subjects (see, for instance, O'Donoghue 2014, Van Maanen 2011, Behar 1997, and Wolcott 2002). Van Maanen's three ideas of 'realistic, confessional and impressionist tales' have been adapted and combined into meta-systems of analysis in this paper. There were real tales of plant collecting, confessional tales from those who knew Hildred, and filling in the gaps there are impressionist tales that provide background detail and create

some more meaningful contemporaneous descriptions of what Hildred's life *may* have been like.

Behar's recommendation that a 'humanistic approach' written from the position of a 'personal voice' has also been utilised throughout, developing a compassionate epistemology. What has been gained by this ideographic methodological approach is a deeper understanding of Hildred's background, albeit spoken through other people's voices.

Specific Conclusions

This paper raised some important methodological difficulties when it comes to writing biography: diminished accuracy due to missing data and the ethics involved in researching friendship, coupled with the impossibility of posthumous consent.

All lives are tangled up with other people and other things. Those 'things' provided the focal point for the research, primarily Hildred's herbarium and its eventual relocation to Liverpool. The stories and photographs provided a limited glimpse into Hildred's life as a plant collector and her reclusive and somewhat eccentric lifestyle. However, there is insufficient evidence for a complete examination of Hildred's life, but we do now have a picture that is situated within a 'network of meanings' collected and then interpreted through analysis (Erben, 1998: 16). Missing data has been inferred by carefully including historical background from other sources in order to imaginatively fill the gaps in Hildred's life story. This technique creates an appreciation of Hildred's life work rather than a complete, historically accurate biography.

General Conclusions

Hildred probably could not conceive of the way in which her carefully displayed specimens can now be seen online and in the Liverpool Museum. The advantage of digitised herbaria is that the information can be scrutinised by scientists anywhere. However, digitised herbaria cannot replace the real thing. Deng (2015) noted that worldwide herbaria are closing down or amalgamated as upkeep is so expensive. But today, herbaria have 'entered a new era with enhanced scientific, educational, and societal relevance' (Heberling *et al.* 2019: 812).

Hildred's work in the past, through the expertise of those who preserve it today, may yet hold answers for tomorrow's botanists, scientists and social historians. Besnard *et al* (2018: 323) explain the current usefulness of herbaria as going much further than 'originally anticipated … following scientific advances and societal priorities'. They are no longer thought of as just a miscellany of dead plant material; they are useful resources. We should remember that herbarium specimens are not dusty old fragile artefacts; each specimen is a detailed scientific testimony to its ecology, physiology and anatomy, as well as a social-historical record of the person who put it into the collection.

This paper focused on one particular aspect of Hildred's life: her herbarium. It was not about friendship *per se,* but our relationship had to be acknowledged. Friendship 'has received little systematic attention from sociologists', according to Allan and Adams (2006: 1), presumably because such loosely reciprocal bonds are difficult to define; friendships change and adapt over time. I have deliberately included notions of friendship as part of this biography and accept that my relationship with Hildred changed over 30 years as our lives diverged. But there is a demonstrable link between friendship and gender, as well as the social-professional-performance roles we occupied as women and

scientists and the maturing and evolving individuals that we were then and became as time passed.

The relationship between friends, women, other people, the everyday institutions where we worked and studied, and the socially constructed context in which we lived has impacted Hildred's story. Fox, in her amusingly titled book, based on her PhD thesis, 'Where there's muck, there's bras', tells us to 'remember – where there is history, there are women who have been written out of it' (2022: 18). Hildred's history and her herbarium have now been thoughtfully written in.

Hildred was an 'amateur', a word often used pejoratively, especially when connected with science. But according to Malone, 'until the end of the eighteenth century … most scientists were amateurs' (2002: 4). This 'amateur' status poses a direct challenge to the hegemony enjoyed today by male scientists but endured by female scientists. Malone also points out that 'curiosity is the hallmark of the scientist' (Malone, 2002: 3), and Hildred certainly was curious in both senses of the word. Botanising opened science's 'back door', but today, Miss Bigwood's herbarium stands as a testament to her life's achievement. The contribution made by such amateurs to science is considerable, and it would be well to remember that Albert Einstein, the Nobel prize-winning theoretical physicist, developed his theory of relativity whilst an amateur.

What about women in science today? Collectively, we must continue knocking on those closed doors. At present, female participation in science varies from 22% overall to 61% in the gender-stereotypical biosciences (Wood, 2017). Friendships, on the other hand, endure whether or not there's a sociologist recording the transactions and analysing the meanings.

Finally, to answer the hypothetical questions originally posed in this paper, Hildred's personal, social and institutional contexts have been situated within current theories of meaning-making. This produces an interpretation rather than a reconstruction of 'Biggie' and her accomplishments. This new understanding rests within a matrix of broader, situational entanglements, both past and present. Hildred's life was lived, some of it was observed, and her story has now been told.

Notes

1. Photo by John Page, Hildred as 'maid of honour' at my wedding, 1975
2. Photo by Andrew Agnew
3. See for example, A D Q Agnew (2013) Upland Kenya Wild Flowers and Ferns, third edition. Nature Kenya Publications: Nairobi.
4. Photo by Robert Page
5. Bigwood herbarium specimens Figures 4 & 5 from BSBI, https://herbariaunited.org/atHome/
6. Prior to 2013 this was called the Botanical Society of the British Isles and is now the Botanical Society of Britain and Ireland.
7. From the British Ministry of Information archive
8. Courtesy of UCW Aberystwyth Archives and Management Records.

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