Horticultural Journalism as a Chronicle of Change:

A Review of *Gardeners' Chronicle*, 1841-Present

A Specialist Project
Submitted to the Royal Botanic Garden Edinburgh and Scotland's Rural College (SRUC)

by

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Summary

This project reviewed one British horticultural print journal, *The Gardeners' Chronicle*, from its inception in 1841 as a weekly newspaper to its present incarnation as the weekly trade magazine *Horticulture Week,* to determine how horticultural journalism evolved during this time. By reading and classifying the articles in one issue every three years for the 175-year print run, three themes emerged that were consistent from 1841 *Gardeners' Chronicle* to present-day *Horticulture Week*. These are:

- An intention to convey *practical science-based cultivation advice and* share associated *technological innovations*
- A responsibility to report *news*
- A duty to *arbitrate and advocate* for the horticultural industry and gardeners, especially with regard to their education

Conversely, several major changes were discovered over the print run, including:

- The *decline of practical advice* in favour of increased business/product information
- Loss of articles on *plantsmanship and plants*
- *Change in writers* from gardeners to professional journalists
- Disappearance of *dialogue/information sharing* between gardeners through the publications

A review of the genesis of horticultural journalism in the Victorian era and interviews with present-day horticultural journalists, including the current editor of *Horticulture Week*, provided insight into how the field developed, evolved, and where it stands at present. Taken together these changes reflect *Gardeners' Chronicle's* evolution from a publication created by gardeners for gardeners into a modern trade magazine created by journalists for businesspeople. And on a larger scale, these changes reflect the changes in gardening itself, and in its priorities and practitioners.

Acknowledgements

I would like to acknowledge Graham Hardy, RBGE Serials Librarian, for guiding this project by sharing his vast knowledge of horticultural periodicals, as well as where to find them!

Thanks go to Greg Kenicer, Phil Lusby, and Alan Elliott, RBGE Education staff, for their advice on this project, and for sharing their knowledge and enthusiasm for horticulture and history.

I'm indebted to Kate Lowe, Editor of *Horticulture Week*, Chris Young, Editor of *The Garden*, and Adam Pasco, founding editor of *BBC Gardener's World Magazine* and consultant horticultural journalist, for their perspectives on the current state of horticultural journalisms, how it has changed, and their advice to a would-be garden writer.

Finally, I would most like to thank my parents, Charles and Nancy Packard, who have made my international adventure and second career possible with their willingness to manage my home and pets that I left in their care. They deserve all the credit for encouraging me to pursue a fulfilling vocation in horticulture, and for moving mountains, and mountains of my stuff, to make *this* happen.

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1. Introduction:

“Horticultural periodicals have contributed in no small degree to the encouragement of interest in gardening, the propagation of new plants, and the development of new techniques” (Desmond, 1977).

Since the publication of Britain’s first major horticultural magazine, William Curtis’s *Botanical Magazine* in 1787, horticultural journalists have used print media to educate gardeners, report news, arbitrate taste and advocate for the industry. Like all newspapers and magazines, horticultural journals reflect the times in which they were published, and by examining them one may learn much more than the gardening practices of the era.

This project reviewed one British horticultural print journal, *The Gardeners’ Chronicle*, from its inception in 1841 as a weekly newspaper to its present incarnation as the weekly trade magazine *Horticulture Week,* to determine how horticultural journalism evolved during this time. *Gardeners’ Chronicle* was chosen for review because of its scope and reputation both at its inception and through its history. Envisaged as “a weekly record of everything that bears upon Horticulture or Garden Botany,” it is what RHS Historian Brett Elliott calls the “greatest of all horticultural periodicals” (Elliott, 1993).

Surveying horticultural journalism is relevant to plantsmanship because *The Gardeners’ Chronicle* was written by and targeted to professional horticulturists. It provides first-person accounts what it was like to practice plantsmanship from 1841 to the present day. A literature review provided historical context for the creation of *Gardeners’ Chronicle*, and interviews with current horticultural journalists, including Kate Lowe, the editor of *Horticulture Week*, provided a window into the field at present.

Horticultural journalism is of particular interest to the author, a journalist and photographer, who would like to work in horticultural communications upon completion of the RBGE degree. The project is also topical, *as Horticulture*

Week celebrates its 175-year anniversary this year, and the RHS member magazine *The Garden* turns 150.

A review of the literature indicated no prior studies in existence that examine horticultural journalism over the proposed period of time, and no HND student has examined this topic for their specialist project, making it original (A. Elliott, RBGE Education, 2015, pers. comm., 15 October).

2. Primary Research

2.1 Methodology:

I obtained one *Gardeners' Chronicle* issue every three years from 1841-2015 The issues from 1841-1922 were available online, free, from the Biodiversity Heritage Library (Biodiversity Heritage Library, 2015), and the RBGE library holds bound issues from 1922 until present. I chose the issue published as close to May 1 for each year, in order to have some consistency within a topic that changes throughout the seasons. I reviewed 59 May issues plus the inaugural January 1841 issue for a total of 60 issues analysed for this project.

Focusing on qualitative research instead of quantitative, I read each issue and categorized each major article by its topics and key themes (See Appendix A for data). Aside from articles generally about plants, categories that reoccurred throughout the entire print run, and thus formed the basis of this project, were:

- Practical Advice
- News
- Scientific/Technological
- Dialogue/Opinion
- Arbitrate/Review
- Advocate for Horticulture/Gardeners

For the purposes of this study I did not include several sections of each issue in my analysis, such as the general news section, the home and international correspondence sections, flower show reports, society conference proceedings, and advertisements, simply because this would have made the amount of information to be analysed in each issue unmanageably large. I focused instead on the major articles and editorials in each issue.

Even with reducing the number of articles analysed, categorizing each article was sometimes a best-guess effort as so many articles had multiple themes. For example, an account of a plant-hunting trip could have been categorized as practical advice, if it mentioned how to collect or transport plants, scientific/technological discovery if it highlighted new equipment used for collecting, or industry news. I forced myself to assign only one category to each article in order to keep the data manageable, and so chose the one theme I thought was most applicable.

In addition to reading and categorizing the articles, I conducted structured telephone interviews with several current and former editors of horticultural magazines. These included Kate Lowe, who edits *Horticulture Week*, Chris Young, who edits the RHS member publication *The Garden*, and Adam Pascoe, the founding editor of *BBC Gardener's World Magazine* and current horticultural journalism consultant. See Appendices B, C, and D for interview transcripts.

For historical context and background information, I read a biography of Joseph Paxton, who started *Gardeners' Chronicle*. I read several books on John Claudius Loudon, whose *Gardener's Magazine* is seminal in the field of horticultural journalism and an important influence on *The Gardeners' Chronicle*. I also read a biography of Shirley Hibbard, who founded *Amateur Gardening*, a competing publication to *Gardeners' Chronicle* begun in 1884. Various other books and articles helped flesh out the history of Victorian-era horticultural journalism, including several publications by RHS Historian Brent Elliott.

Note: Original spellings, punctuation, capitalization, and italicization (or lack thereof) are retained in all quotations.

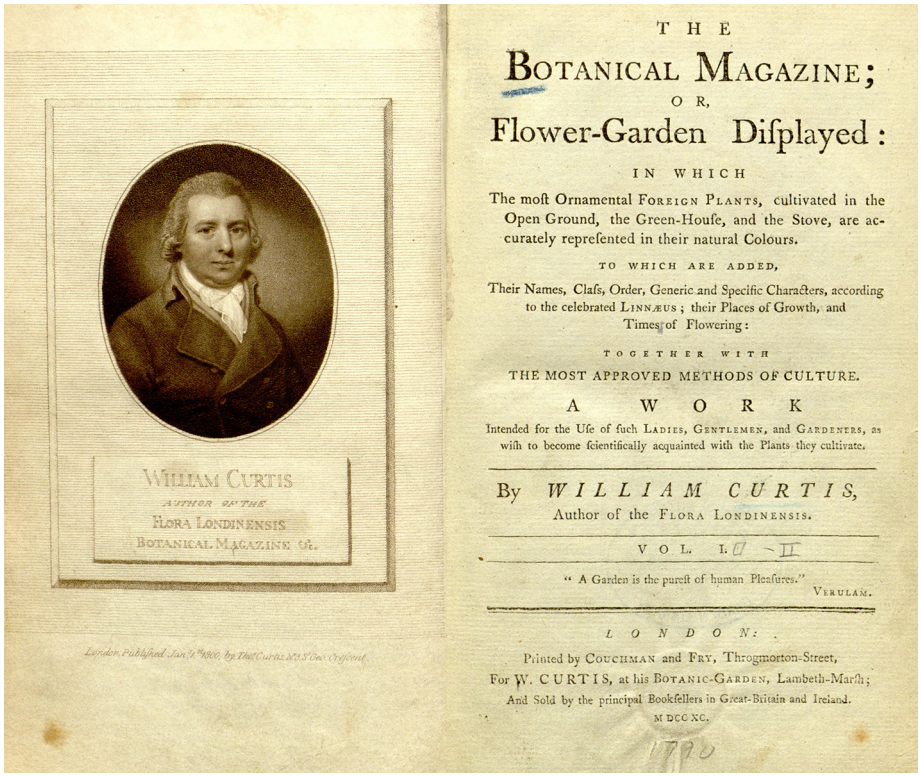
3.0 Background Information

3.1 Beginnings of Victorian Horticultural Journalism

To understand how horticultural journalism affected professional horticulture, it is important to examine the Victorian-era philosophical, technical and social trends that created a climate in which gardening magazines could be created and flourish. A changing intellectual and philosophical worldview in the Victorian era (1837-1901) allowed people to form and publicly voice their opinions. “The mind was no longer a mirror, a passive reflector of the external world; it was active, self-determining, powered from within. Gardening, similarly, was no longer to be subservient to the natural landscape, but to be independent, imaginative, and original” (Elliott, 1986).

With the Victorian minds released to think for themselves, it was only natural that people wanted to share their opinions. This created the perfect environment for the launch of horticultural journals, beginning in 1787 with the *Botanical Magazine; or Flower Garden Displayed*, founded by William Curtis. The magazine would later be called *Curtis’s Botanical Magazine*. It is still published under that title by Kew and considered the longest running botanical periodical (Kew, 2016).

As the 19th century began Britain was inundated with exotic new ornamental plants from the colonies and expeditions all over the world. Part of the rise in horticultural journals during this time is due to the need to describe each acquisition followed by the need to figure out, and then share, how to keep these plants alive in a climate that was often very different from their usually tropical origins. The *Botanical Magazine* took the first step toward disseminating this information. It was founded with the intention of “making ladies and gentlemen scientifically acquainted with the plants they cultivate” (*Botanical Magazine*, 1787, Vol. 1) (See Figure 1).



THE
BOTANICAL MAGAZINE;
OR,
Flower-Garden Diſplayed:
IN WHICH
The moſt Ornamental FOREIGN PLANTS, cultivated in the Open Ground, the Green-Houſe, and the Stove, are accurately repreſented in their natural Colours.
TO WHICH ARE ADDED,
Their Names, Claſs, Order, Generic and Specific Characters, according to the celebrated LINNÆUS; their Places of Growth, and Times of Flowering:
TOGETHER WITH
THE MOST APPROVED METHODS OF CULTURE.
A WORK
Intended for the Uſe of ſuch LADIES, GENTLEMEN, and GARDENERS, as wiſh to become ſcientifically acquainted with the Plants they cultivate.

By *WILLIAM CURTIS*,
Author of the FLORA LONDINENSIS.

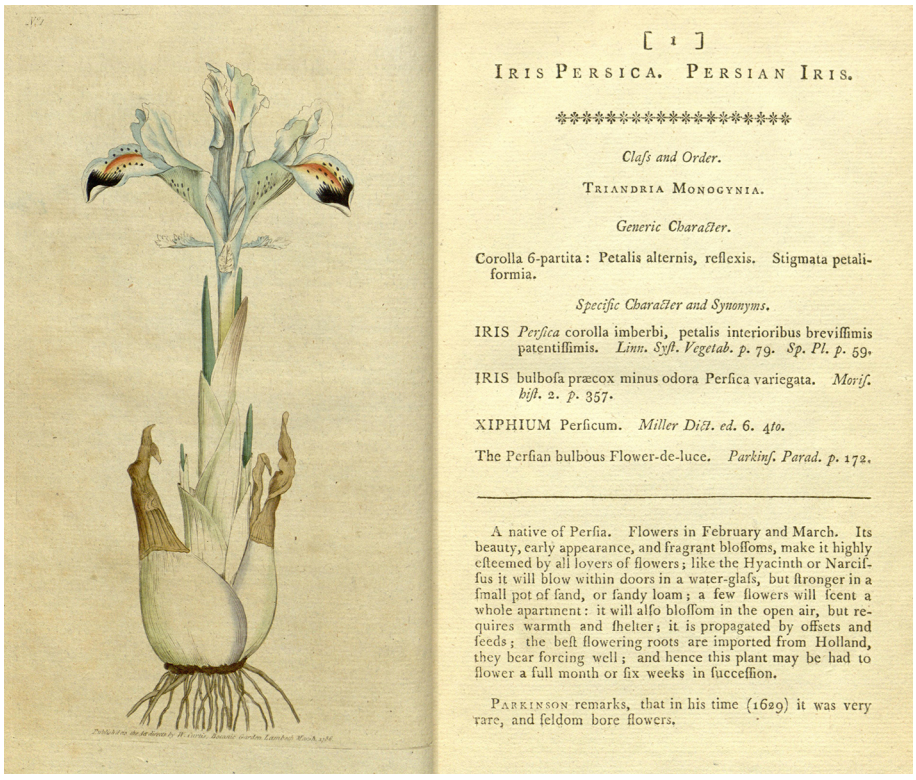
VOL. I.

"A Garden is the pureſt of human Pleaſures."
VERULAM.

LONDON:
Printed by COUCHMAN and FRY, Throgmorton-Street,
For W. CURTIS, at his BOTANIC-GARDEN, Lambeth-Marſh;
And Sold by the principal Bookſellers in Great-Britain and Ireland.
M DCC XC.

Figure 1: William Curtis and the first issue of his *Botanical Magazine*, 1787.

Each issue featured plant profiles with a brief description of origin and cultivation, and hand-coloured plates, drawn from life. (See Figure 2).



[1]
IRIS PERSICA. PERSIAN IRIS.

Claſs and Order.
TRIANDRIA MONOGYNIA.

Generic Character.
Corolla 6-partita: Petalis alternis, reflexis. Stigmata petaliformia.

Specific Character and Synonyms.
IRIS *Perſica* corolla imberbi, petalis interioribus breviſſimis patentiſſimis. *Linn. Syſt. Vegetab. p.* 79. *Sp. Pl. p.* 59.
IRIS bulboſa præcox minus odora Perſica variegata. *Moriſ. hiſt.* 2. *p.* 357.
XIPHIUM Perſicum. *Miller Dict. ed.* 6. *4to.*
The Perſian bulbous Flower-de-luce. *Parkinſ. Parad. p.* 172.

A native of Perſia. Flowers in February and March. Its beauty, early appearance, and fragrant bloſſoms, make it highly eſteemed by all lovers of flowers; like the Hyacinth or Narciſſus it will blow within doors in a water-glaſs, but ſtronger in a ſmall pot of ſand, or ſandy loam; a few flowers will ſcent a whole apartment: it will alſo bloſſom in the open air, but requires warmth and ſhelter; it is propagated by offsets and ſeeds; the beſt flowering roots are imported from Holland, they bear forcing well; and hence this plant may be had to flower a full month or ſix weeks in ſucceſſion.

PARKINSON remarks, that in his time (1629) it was very rare, and feldom bore flowers.

Figure 2: *Iris persica* illustration from the first issue of Curtis's *Botanical Magazine*, 1787.

The colour plates were included to attract readers, but Curtis felt them essential in order to accurately and scientifically represent the plants. The magazine was popular at launch, selling 3,000 copies of its first issue at a price of 1s.

The audience for the magazine was an educated upper class, not the practicing gardener. The plants featured in the magazine were described using the Linnaean system of classification, and partially in Latin. At that time it was mostly the educated upper class that had a working knowledge of Latin, as well as money to buy and tend exotic new plants. Thus the magazine was designed to be “enjoyed in the private library of the wealthy and leisured class of men and women who also visited the gardens of estates outside the metropolis [of London]” (Dewis, 2014). In the early 19th century, when most people were earning no more than 10s a week. (Dewis, 2014), regular gardeners simply couldn’t afford the publication, even if they could read it.

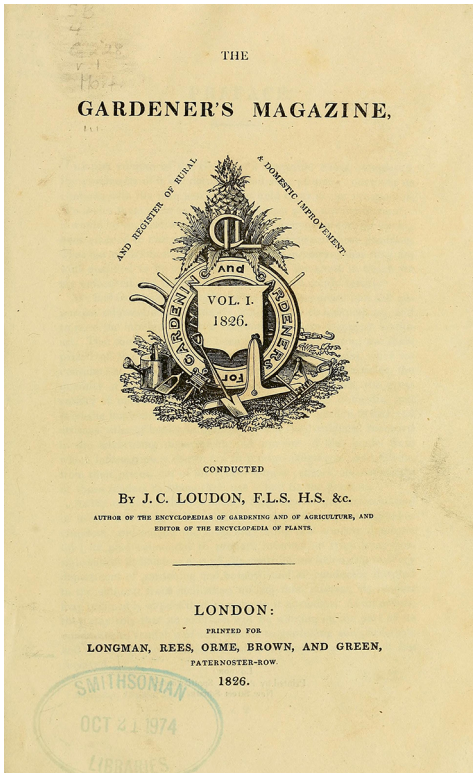
Other horticultural publications soon followed the *Botanical Magazine*, including *The Transactions of the Horticultural Society of London*, which later became the Royal Horticultural Society. The Society was founded in 1804, and launched its *Transactions* in 1807. It was expensive, priced at £1 for members (Dewis, 2014). Like the *Botanical Magazine*, it was the high quality colour illustration, done by artists such as William Hooker and Mrs. Withers, that made the price high (Elliott, 1993).

The *Transactions* were important, though, because they introduced extensive practical writing on how to garden, including topics such as building hothouses, forcing fruit, and creating compost. However, the price of the magazine precluded most working gardeners from accessing this information, and the magazine’s readership remained restricted to the wealthy and educated.

3.2 John Claudius Loudon and *Gardener's Magazine*

Figure 3: John Claudius Loudon.

This exclusivity began to change in 1826 when Scottish botanist John Claudius Loudon (See Figure 3) introduced the *Gardener's Magazine and Register of Rural and Domestic Improvement* as a supplement to his *Encyclopaedia of Gardening* (Dewis, 2014), which was considered to be "the major gardening reference work of the age" (Elliott, 1986). The magazine was initially a quarterly publication, and from the very beginning its audience was practicing gardeners, a message telegraphed by the cover image featuring tools of the trade including a watering can, spade, rake, and string-line (See Figure 4).


THE

GARDENER'S MAGAZINE,

AND REGISTER OF RURAL & DOMESTIC IMPROVEMENT.

VOL. I.
1826.

CONDUCTED

By J. C. LOUDON, F.L.S. H.S. &c.

AUTHOR OF THE ENCYCLOPEDIAS OF GARDENING AND OF AGRICULTURE, AND EDITOR OF THE ENCYCLOPEDIA OF PLANTS.

LONDON:

PRINTED FOR

LONGMAN, REES, ORME, BROWN, AND GREEN,

PATERNOSTER-ROW.

1826.

Figure 4: First issue of *Gardener's Magazine*, 1826.

In the preface to the first issue, Loudon wrote, "We had two grave objects in view; — to disseminate new and important information on all topics connected with horticulture, and to raise the intellect and the character of those engaged in the art." (Loudon, *Gardener's Magazine [GM]*, Sept.,1826, Preface). [Note: Because of frequently changing titles, volume and series numbers, *Gardener's Magazine* and *Gardeners' Chronicle/Horticulture Week* will be referenced using the above date and page number format.]

One of Loudon's greatest passions was the education of gardeners, which he saw as a way of enhancing the status of the profession. With the founding of *Gardener's Magazine*, Loudon had a

platform for directly exhorting gardeners to improve themselves, which he did as early as the first issue of the publication:

> As gardening has advanced, as its productions and its province have extended, the situation of head gardener has become more and more important...It is highly necessary, therefore, that an improvement should take place in the elementary education of those intended for head gardeners (*GM*, Sept., 1826, p. 8).

Loudon then did something even more revolutionary. He invited all readers to contribute to his magazine, opening up lines of communication between people of all classes:

> We invite all those who take an interest in gardening to assist us by their advice, and by the communication of information on every subject connected with the work: we especially invite practical gardeners to come forward and support a work calculated to promote their own honour and advantage (*GM*, Sept., 1826, p. 9).

This invitation is unusual because until this point, horticultural magazines such as the *Botanical Magazine* and the *Transactions of the Horticultural Society* had been written by and for an exclusive group of educated and wealthy men—most likely the ones stocking their glasshouses with the latest exotic plants to arrive from abroad—and *not* their gardeners.

As noble as Loudon was in his effort to create a horticultural publication accessible to all, there remained the problem of how to reach his audience. Costing 5s 0d in 1826 (Dewis, 2014), *Gardener's Magazine* was still an expensive purchase for the working gardener for whom it was intended. Ever ready with new initiatives, Loudon championed libraries for gardeners: "Wherever there is a tool-house there ought to be a library, and every garden, no matter how small, ought to have its books as well as its tools" (*GM*, Jan. 1827, p. 2). He even ran a competition for the establishment of garden libraries, leading to the creation of seven in a year (Dewis, 2014). Of

course it bears mentioning that such populism was not entirely altruistic; it was also a way of increasing sales of his magazine.

3.3 Other Catalysts: Reduced Taxes and Technological Innovations

Other social and political changes were occurring in the early to mid-1900s that would make periodicals even more accessible to all people. From 1712 there had been a tax on newspapers, more than doubling their 3d. price to 7d (in 1827), which few working people could afford on a typical weekly wage of 10d. (Spartacus Educational, 2016). Reformers campaigned against what they called a “tax on knowledge,” arguing that it wasn’t only the wealthy who had a right to information. In 1836 the campaigners successfully had the tax reduced to 1d from 4d, and by 1855 the stamp duty was abolished. In this time frame other “taxes on knowledge,” were also reduced or abolished: Pamphlet duty was repealed in 1833, advertisement duty in 1853, newspaper tax repealed in 1855, and paper duty was repealed in 1861 (History House, 2016).

The reduction of these taxes occurred simultaneously with new innovations in print technology, and an increase in railroad lines that allowed magazines and newspapers to be printed and distributed much less expensively than their forbearers. It made knowledge more accessible to people of all classes and income brackets, and created a massive growth in the number of published periodicals. (Hewitt, 2013).

Gardener’s Magazine thrived until the 1830s, when it circulation began to decline facing competition from a growing roster of new, less expensive horticultural publications entering the market. Some titles include Joseph Paxton’s *Horticultural Register and General Magazine* (1831), *Floricultural Cabinet* (1833), *Horticultural Journal* (1833), and *Paxton’s Magazine of Botany* (1834). “By 1845, the potential subscriber was faced with six different colour-illustrated magazines devoted to plants or gardening, five similar titles having been launched and folded within recent years” (Elliott, 1986).

Gardener's Magazine faced declining profits until it ceased publication shortly after Loudon's death in 1843.

3.4 Joseph Paxton and *Gardeners' Chronicle*

With a flood of horticultural periodicals, and each editor desperate for a piece of the saturated market, things got a little nasty. Editors cast aspersions on one another in print, accusing each other of, among other things, having inferior plates that misrepresented their botanical subjects, and of plagiarizing articles and illustrations. In 1837 George Glenny, a florist (which at that time was a nurseryman who grew flowers, not a flower arranger), published the first horticultural weekly newspaper, *Gardener's Gazette*. Glenny had been banned from Horticultural Society shows because of his rudeness. He'd also published unflattering and critical articles about John Lindley, then secretary of the Society (Figure 5). In response Joseph Paxton (Figure 6), then head gardener for the Duke of Devonshire at Chatsworth and a good friend of Lindley's, and with the backing of the Horticultural Society (Wilkinson, 2012), laid plans for his third venture in periodical publishing and subject of this project: *Gardeners' Chronicle*. In a letter to the curator of the Oxford Botanic Garden, Paxton denounced *Gardener's Gazette* as a

Figure 5: John Lindley as depicted in *Makers of British Botany*, in 1848.

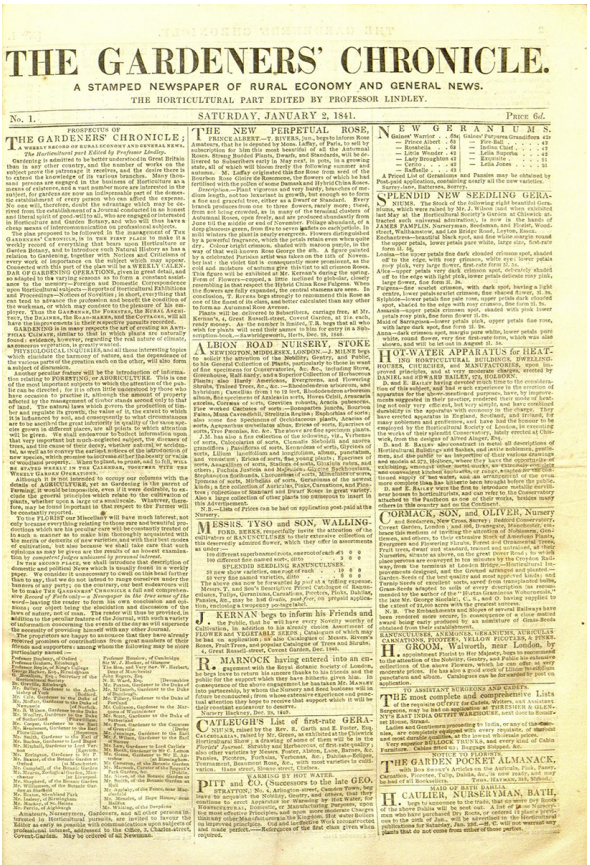
Figure 6: Joseph Paxton, as painted by Octavius Oakley, circa 1850.

disgrace, adding, “A highly respectable paper for the Gardening World, to be conducted in a gentlemanly manner, and containing interesting matter, is very much wanted” (Desmond, 1977).

Within six months, on January 2, 1841, Paxton and Lindley, together with the horticulturist Charles Wentworth Dilke and printer William Bradbury, published the first issue of *Gardeners’ Chronicle*. It took the format of a weekly newspaper with no colour plates and few illustrations, which accounted for its relatively low price of 6d. (Desmond, 1977) (See Figure 7).

Paxton served as the general editor, and John Lindley edited “the horticultural part.” They envisaged *Gardeners’ Chronicle* as such:

> Many thousand persons are engaged in the business of Horticulture as a means of existence, and a vast number more are interested in the subject, for gardens are now an indispensible part of the domestic establishment of every person who can afford the expense. No one will, therefore, doubt the advantage which may be derived from the establishment of a Journal conducted in an honest and liberal spirit of good-will to all who are engaged or interested in Horticulture and Garden Botany, and who will thus have a cheap means of intercommunication on professional subjects. The plan proposed to be followed in the management of *The Gardeners’ Chronicle* is … to make it a weekly record of everything that bears



THE GARDENERS' CHRONICLE.

A STAMPED NEWSPAPER OF RURAL ECONOMY AND GENERAL NEWS.

THE HORTICULTURAL PART EDITED BY PROFESSOR LINDLEY.

No. 1. SATURDAY, JANUARY 2, 1841. Price 6d.

Figure 7: First issue of *Gardeners’ Chronicle*, 1841.

> upon Horticulture or Garden Botany. (*The Gardeners' Chronicle [GC]*, Jan. 2, 1841, p. 1)

The original *Chronicle* was a weekly newspaper, and it made good on its early promise to feature not only on horticulture and botany, but also arboriculture, agriculture, help-wanted advertisements, and a weekly calendar of "garden operations." It even included general news in an attempt to make it a one-stop news source for its readers.

Like Loudon before him, Paxton recognized that the best people to write about gardening were the people actually working in the garden. To that end, he solicited written contributions in the first issue: "Amateurs, Nurserymen, Gardeners, and all other persons interested in Horticultural pursuits are invited to favour the editor as early as possible with communications upon subjects of professional interest" (*GC*, Jan. 2, 1841, p. 1). The first issue of *Gardeners' Chronicle* lists "friends and supporters" who've promised to write articles. Out of 49 names, including several professors, lawyers, a doctor, a reverend, and one Sir W.J. Hooker, 22 men are listed with the title of "Gardener." (G*C*, Jan. 2, 1841, p. 1).

That Paxton found contributions of working gardeners valuable is no doubt because he was himself one. Indeed he owed his rise from destitute son of a farm labourer to being one of the most famous and respected men in Britain to gardening. Paxton was born on August 3, 1803; the year plans were hatched to create the Horticultural Society of London. Paxton's father died when Paxton was just seven, leaving the family in poverty. Little is known of Paxton's schooling, other than it was remarkable that he managed to receive some given the financial situation in his family. Around age 13 Paxton went to work as a gardener at Battlesden Park (Colquhoun, 2006). Paxton worked in other gardens before securing a job as a labourer, in November 1823, in the new experimental gardens created by the Horticultural Society at Chiswick House, on land leased from William George Spencer Cavendish, the sixth Duke of Devonshire.

Paxton learned his trade at Chiswick for a few years before a chance meeting with the Duke in the garden set the course of his life. The Duke, taken by Paxton, invited him to be superintendent of gardens at Chatsworth in 1826. For Paxton, to be appointed head gardener at one of England's largest estates, and employed by one of the wealthiest men in Britain, at age 22 was a life-changing stroke of fate. The position at Chatsworth, and his close relationship with the Duke, would allow Paxton to become one of the greatest horticultural innovators of all time, and wealthy as well. Much has been written about Paxton's achievements, but for the sake of this project this background information on Paxton's early years explains why he was in a position to start *Gardeners' Chronicle* and why contributions from working gardeners were an important founding tenant of the newspaper.

"Interesting matter," published in a "gentlemanly manner," proved to be just what the horticultural world wanted to read. *Gardeners' Chronicle* was an instant success. Paxton and Lindley jointly edited the *Gardeners' Chronicle* until they both died in 1865. Then Dr. Maxwell T. Masters (1833-1907), an academic botanist, took up the reins. He "continued to uphold the reputation of the paper among the upper classes and the professional market, and it was still being used as a trade paper with its classified advertisements" (Wilkinson, 2012). Masters edited the paper until his death in 1907, and *Gardeners' Chronicle* went through several different iterations, including incorporating *Gardening Illustrated* and *The Greenhouse* in the late 1950s through 1960s. In 1969 *Gardeners' Chronicle* incorporated *The Horticultural Trade Journal* to become *Gardeners' Chronicle and Horticultural Trade Journal*, a mouthful of a name it would keep until 1986 when its title changed again to the current *Horticultural Week* (Figure 8), still in print today.

Figure 8: *Horticulture Week*, in 2015.

4. Discussion

Upon reviewing 175 years of *Gardeners' Chronicle* it became clear that several themes introduced in the newspaper's original prospectus continued throughout the entire print run into the present-day *Horticulture Week*. These include:

- An intention to convey *practical science-based cultivation advice and* share associated *technological innovations*
- A responsibility to report *news*
- A duty to *arbitrate and advocate* for the horticultural industry and gardeners, especially with regard to their education

Gardeners' Chronicle changed in other noticeable ways most likely never foreseen when Paxton conceived his horticultural newspaper in 1841. A few of these include the evolution of the magazine into a trade journal focused more on equipment than practical skills and plantsmanship, a increased focus on plant retailing and business, a change in writers from horticulturists to journalists, and the loss of the back-and-forth dialogue amongst readers that really formed the voice of the original *Gardeners' Chronicle*.

4.1 Practical Science and Technology throughout Gardeners' Chronicle

Gardeners' Chronicle was founded with some lofty goals in mind, and perhaps the greatest was the desire to convey practical, science-based information to gardeners. Brett Elliot (1986) suggests that the publication of John Lindley's *Theory of Horticulture*, which was published in 1840, crucially influenced the incorporation of science into practical horticulture, which *Gardeners' Chronicle* promised to deliver in its prospectus:

> The art of Gardening would soon be deprived of all novelty and interest, if it were not for the daily discoveries of science, and the

> application of them as they arise to the practice of cultivation (*GC*, Jan. 2, 1841, p. 1).

Gardeners were challenged to develop ways growing the new exotic plants that were flooding into British collections from abroad, which helped spur the incorporation of science into practice. The need to replicate the tropical environments of many of these "hothouse plants" set off a wave of technological innovations:

> The embellishment of gardens is partly in proportion to the number of new flowers that are introduced from foreign climates; the successful cultivation of these exotics depends on the skill with which the soil and climate that are natural to them are understood and imitated; the imitation of climate depends upon the arts of heating, ventilating, glazing, and other processes of the like nature, and the latter involve the necessity of some acquaintance with the laws of heat, and of the motion of fluid. (*GC*, Jan. 2, 1841, p. 1)

To that end, the May 1, 1841 issue published science-based articles on "the effects of coloured light," as they relate to seed germination and "rural chemistry," which goes into detail about the properties of potash, nitre, and soda and their effect on soil. Countless other articles demonstrate the new melding of science and practice, with the editors in the first issue rather patronizingly soothing unlearned gardeners:

> Let not our readers fear lest we oppress them with too much learning. We perfectly understand that our general duty is to write for those who have little acquaintance with science and to instruct the uninformed rather than to gather information for men of science, who can always collect it themselves from its original sources. (*Gardeners' Chronicle*, Jan. 2, 1841 p. 3)

It is a bit ironic then, that *Gardeners' Chronicle* is not shy about insulting the intelligence of anyone who fails to keep up with new developments: "Such an opinion is a cataract upon the horticultural eye; the blindness it produces, if

not total, is enough to envelope objects that should be clear and well defined, in an intellectual fog" (*GC*, May 7, 1853, p. 291).

This idea of intellectual inquiry as a means of self-improvement is very Victorian, and this developing mind set is shown in the tension between wanting to scientifically understand why something happens and acting on prior experience-based knowledge, as shown in this passage:

> The vine disease still lingers among us, and continues to destroy the crops of the inexperienced. The case calls for the application of any remedy which answers the purpose, whether we can account for its mode of action or not. Sulphur is such a remedy, and it would be a folly to refuse to employ it merely because we do not know why it kills our enemy. While we are saying this we are by no means insensible to the necessity of searching diligently for the cause of the disease. (*GC*, May 3, 1856, p. 300).

Other scientific advances covered in *Gardeners' Chronicle* include improvements in the technology of transplanting trees, which "of all the technical improvements [was] the one that had the most obvious impact on garden design" (Elliott, 1986). The pioneer was William Barron, who invented the technique of moving large trees with soil still around their roots, and then "replanting" the tree by resting it on the ground and building soil around the rootball. In an 1880 article he published the amazing story of his successful move of a 1,000 year-old yew (*Taxus baccata*) from one end of the Buckland churchyard to the other. The excavated soil around the roots was 16x15 feet, and the mass moved weighed 56 tons. (See Figure X for image of excavated tree.) Not only is the article important for marking a technological achievement, Barron also mentions an important scientific discovery made in the process: the male tree has a solitary female branch (*GC*, May 1, 1880, p. 557). This revelation has echoes in a story just published by RBGE last year, in which the Fortingall Yew in Perthshire, Scotland, and potentially the oldest tree in Europe, was discovered to have a female branch growing on a male tree. (Botanics Stories, 2015).

The technological innovations most frequently published in *Gardeners' Chronicle* are associated with keeping tender exotic plants warm in the cold British climate. Scores of articles were devoted to developments in glasshouse heating with hot water, beginning with a plan for a mushroom house heated by hot water in the first issue analysed (*GC*, May 1, 1841, p. 277). Polmaise heating, based on convection, is mentioned throughout the 1840s with gardeners of various estates reporting their successes and failures (*GC*, May 1, 1847, p. 283). Diagrams of new boiler and piping designs make up many of the paper's illustrations (see Figure X. May 6, 1871 for boiler illustration). An article on glasshouse heating published in 1871 suggests a new way of plumbing that will "put hot houses within the reach of the million" (*GC*, May 6, 1871, p. 578). Paxton himself was integral to the democratization of indoor gardening. Beginning in 1858 he invented "Hothouse for the Million," an affordable, portable glasshouse which he then marketed in the pages of *Gardeners' Chronicle* (Grant, 2013). These developments are an important evolution in horticulture because they mark the beginning of the idea that the cultivation of exotic tropical plants was no longer a privilege of only the wealthy. With each advancement, horticulture came more within the reach of ordinary people, a theme that has continued in horticultural publications until the present day.

Glasshouse heating continues to be a hot topic into 1883, with separate articles on maintaining the temperatures of the vinery, the pine stove (for growing pineapples), and the orangery. In fact, so often is the topic mentioned that it becomes clear that heating and maintaining a properly tropical humidity were the main concerns of the Victorian gardener: "Much time will now be taken up in attending to the various heats of the different houses, and the general requirements of the plants. The houses will require to be well damped as regards bare surfaces three times a day at least, and the inmates examined each day" (*GC*, May 7, 1892, p. 591). Given the monetary value of new exotic introductions, and the lengths gone to collect them in the wild and ship them alive across oceans, the suggestion that gardeners are servants to the plants is not too far off base.

In the very late 1890s and into early 1900 mention of glasshouse improvements declines in the articles analysed for this project, and the clue may be in the above article that foretells their future accessibility by the masses. “By the early 20th century, as the world slowly crept out of the “golden” Victorian era, plain, self-assembled and small glasshouses were manufactured, so that those with enough space and money could afford their own glass and iron structure within their very own garden” (Hartley Botanic, 2015). Innovations in glass houses had stabilized and they became lower-priced and mainstream.

Around 1900 there is a new shift in the focus of the *Gardeners’ Chronicle* articles analysed to agriculture and the greater use of chemical fertilizers and insecticides. In 1895 an article is published on a crop rotation experiment at the Agricultural Experimental Station at Rothsmated that included the application of “complex artificial manure” comprised of “superphosphate, salts of potash, soda and magnesia, ammonium salts, and Rake-cake” (*GC*, May 4, 1895, p. 551). These “artificial manures” are again discussed in depth in 1898, particularly with regard to their use in conjunction with “dung” and the resultant denitrification of soil. The article brings to light the changing times as it posits whether gardeners will accept these new artificial fertilizers:

> Artificial manures are trumpeted everywhere as the saviours of agriculturists and horticulturists…The question, however, remains as to how and when these artificial manures should be used. Farm and stable manures have for ages given satisfactory results, under certain circumstances, that it would be a hopeless attempt to try and persuade practical growers not to use them.” (*GC*, May 7, 1898, p. 275).

The growing acceptance of chemicals is again present in a 1901 article about spraying fruit trees with an insecticide called Kilmright to combat winter moth:

> Spraying as a means for combating the various insect pests…has now come to be looked upon as a matter of dire necessity, if the crops are to be saved from their ravages…Spraying has not yet by any means become universal in this country, yet it is a matter for congratulation to know that it is now adopted by most leading cultivators (*GC*, May 4, 1901, p. 280).

Within thirty years of their first mention in the articles reviewed for this project, the magazine published: “The world is becoming conscious of the importance of artificial fertilisers and anything which hampers their wise and adequate use should be removed” (*GC*, May 5, 1928, p. 319). As the century progressed chemicals are mentioned more frequently, and by the 1960s through today the journal’s pages are dominated with articles on and advertisements for herbicides, fungicides, and insecticides and the various equipment needed to apply them.

Concurrent with the boom in agrochemistry articles, the negative effects of chemicals are observed: “Thoughtless spraying of crops or weeds by farmers or contractors may kill beneficial insects such as your neighbour’s bees” (*GC*, May 2, 1964, p. 397). In a 1967 article poignantly (and prophetically) titled “Where have all the bees gone?” the author writes:

> Honey bees are now far fewer in number than they were a decade ago. Bees especially have suffered from indiscriminate use of chemical sprays. Chemicals are economically necessary but must be correctly used. We cannot afford to lose the services of pollinating insects and it might well be that in the very near future the preservation of these insects could become a nation-wide, even world-wide economic necessity. (*GC*, May 3, 1967, p. 3).

In 1979, the concept of integrated pest management makes its appearance:

> With the continual loss of existing chemicals through resistance of pests it is obvious that the [horticultural industry] could well be faced with a situation where there are no more effective chemicals left… Integrated control methods seem to offer a promising combination which makes use of both biological methods and also specific chemical applications (*GC&HTJ*, May 4, 1979, p. 1).

The introduction, growing acceptance of, and eventual cautions about chemicals comprise one of hundreds of examples of how technological and scientific advances can be charted in the pages of *Gardeners' Chronicle*.

4.2 "The Week's Work": A Practical Advice Column

In keeping with its original intent to provide practical, science-based advice, one of the most useful columns in *Gardeners' Chronicle* was a "weekly calendar of gardening operations, given in great detail, and so adapted to the varying seasons as to form a constant assistant to the memory" (*GC*, Jan. 2, 1841 p. 1)**.** Often running to several pages of the paper, "The Week's Work" highlighted pertinent tasks in the kitchen garden and orchard, flower garden and shrubbery, nursery, forest, and coppice wood, as well as in the various glasshouses. The instructions exhibit the typical Victorian distaste for idleness: "Put sticks to peas in good time, and do not allow them to fall over first. Thin out spinach from 4 to 6 inches apart in the rows; also turnips, radishes and every other crop which requires thinning to allow free play of air. Keep the hoe busy amongst crops after heavy rains" (*GC*, May 4, 1889, p. 559). It is so thorough that one could probably run the gardens of a large estate just following its advice. This column survived virtually unaltered until the 1967 issue reviewed, when it had dwindled to just a few paragraphs on "flowers," "fruit," and "vegetables."

A vestige of the weekly calendar of operations crops up in a new section of *Horticulture Week* introduced around 2012, called the "Notebook," which offers "practical, expert-written advice on horticulture and business." In the May 4, 2012 issue there are warnings to watch out for fungus (as well as lists

of the chemical sprays used to combat the various types), alerts about weeds (and the herbicides to kill them), and reminders to check mist systems and order seeds for green manures.

In other current horticultural journals, though, practical advice is still the most important aspect of the magazines. Chris Young, Editor of *The Garden,* notes, “We have checked with readers and no matter what their skill, whether they're beginning, intermediate or expert, they all love the advice pages. I could get rid of half the magazine and just do practical advice every month and people would love it” (Chris Young, Editor, *The Garden*, 2016, pers. comm., 5 February). Though practical advice has declined in the pages of *Horticulture Week*, it is still the most important aspect of horticultural journalism, an idea echoed by Adam Pasco, Founding Editor of BBC Gardener’s World Magazine: “The things people want are what to do, how to do it, and problem-solving advice. There will always be an appetite for people, whether new or experienced, to know what they should be doing at any particular time of year” (Adam Pasco, Founding Editor of *BBC Gardener’s World Magazine* and Consultant Horticultural Journalist, 2016, pers. comm., 12 February). Unfortunately, no current horticultural magazine rivals early *Gardeners’ Chronicle* for the amount and scope of practical advice, written for professional horticulturists, published in its pages.

4.3 *Gardeners’ Chronicle* as a Weekly News Source

One of the most ambitious goals of the original *Gardeners’ Chronicle* was its attempt to “introduce the description of domestic and political News which is usually found in a weekly paper. The reader will thus be provided…with such a variety of information concerning the events of the day as will supersede the necessity of providing himself with any other Journal (*GC*, Jan. 2, 1841 p. 1). About eight pages—half the paper—was originally devoted to worldwide news. Keeping up with such a vast amount of wide-ranging content must have been difficult, and by the May 1, 1847 issue reviewed the general news section has disappeared. However, *Gardeners’ Chronicle* continued to report on the proceedings of horticultural societies as well as exhibitions.

Reporting new plant introductions was integral to *Gardeners' Chronicle* from its inception, and the most column inches are probably devoted to orchids and their care. In fact, there are individual articles on orchids in every reviewed issue from 1841 to 1958. They're the only single genus to receive such attention, which speaks to their popularity, rarity, monetary value and historical importance.

Reports of plant collecting expeditions go hand-in-hand with new botanical introductions and provided exotic and escapist news of foreign lands to gardeners stuck at home in Britain. Famous plant collectors wrote articles about their adventures, such as this series from Robert Cross (sent from Kew Gardens) published in 1862 detailing his journey to Peru the previous year:

> We reached Cataramas late in the evening of the 21st of July, and bivouacked on a large sandbank in a bend or turning of the river. Here we found a large pile of driftwood, beside which we lighted a fire in order to prepare our coffee. As we were busily engaged in cooking, a few sparks happened to fly in the direction of the pile of driftwood and set it on fire. The night, although dark, was intensely hot, so that the drift wood—which was dry as powder—soon swelled into an immense flame, lighting up the opposite bank of the river, an exposing to view about 20 full-grown alligators, stretched out at full length on the sand, and looking on apparently with the utmost unconcern. I never saw anything so fine as the scene presented by this burning pile of drift wood. A large-leaved Ficus lined the banks of the river, from which hung curtains of Passion flowers, Bigonias [sic] and Aroids, and these, intermingled here and there with several fine specimens of Palms and Salix Humboldtiana, had a grand and picturesque appearance, exhibited as they were under the red flames of the burning drift wood. (*GC*, May 3, 1862, p. 405).

These romantic and exciting dispatches no doubt buoyed the exotic plant trade, with potentially dangerous collecting conditions helping to keep prices high for hard-won rare new plants.

As *Gardeners' Chronicle* transitioned to the *Horticultural Trade Journal*, news became an even bigger part of the publication. Today's *Horticulture Week* readers report via survey that news is the most important aspect of the magazine, says Editor Kate Lowe. "If you want to know what's happening in horticulture, you need to be getting into *Hort Week's* news…because it's the most comprehensive service that is out there." So important is news to the present day *Horticultural Week* that it spawned a range of "data products" designed to provide instant information. These include digital pest and disease outbreak alerts and daily e-mail bulletins providing a "quick overview of the key issues that have just broken overnight or the day before," says Lowe. "That sort of information is really crucial for people now so that they can react quickly to the latest issues that might impact them."

Speaking of the original *Gardeners' Chronicle*, Lowe, notes that the intention to convey news has not changed. "Its purpose was exactly the same as I would say our purpose is now. It was an attempt and a recognition that there was a need for information to be shared and disseminated, across a sector or an industry that was growing rapidly" (Kate Lowe, Editor, *Horticulture Week*, 2016, pers. comm., 11 March).

4.4 Arbitration and Advocacy

As self-proclaimed experts, the founders of *Gardeners' Chronicle* felt it:

> An unpleasant but necessary part of our duty is to expose fraud wherever we can ascertain that it is practised. The misrepresentations that exist about inventions of all sorts, new flowers, new fruits, and a great many other things professing to be new, produce great loss to individuals, disgust them with Gardening, and effect an injury to fair dealers…We have for many years had an eye upon such matters, and

> our vigilance will not relax now that we possess the best of all means of exercising it usefully. (*GC*, Jan. 2, 1841 p. 3)

Examples of *Gardeners' Chronicle* writers wielding their power abound in the pages of the newspaper. Some are humorous, such as scathing review of botanical accuracy of paintings exhibited at a Royal Academy show:

> *Gardeners' Chronicle* cannot sometimes refrain from expressing aversion to incorrect representations of the subjects which some contributors make a specialty. One of these [paintings] hardly "suggests" Daffodils at all. To the writer it "suggests" the sudden and violent impact upon the canvas of one or two very decayed Oranges. (*GC*, May 7, 1904 p. 289).

Others are more serious, such as an article ripping the two-year old "Acclimatiation Society of Great Britain, Ireland, and the Colonies" to shreds for their worthless reports and experiments (*GC*, May 3, 1862 p. 403).

The concept of arbitration is alive and well in the present-day *Horticulture Week*. In fact, the second most popular section of the magazine, after the news, is product coverage and review, says Lowe. The magazine runs "kit tests," in which horticultural professionals test a range of equipment, such as brush cutters or chain saws, and report on the best and worst. "This technical information is completely unique in the industry, and we get very good feedback from readers for that" (Kate Lowe, Editor, *Horticulture Week*, 2016, pers. comm., 11 March).

One of the founding tenants of *Gardeners' Chronicle* was that it would remain apolitical. That said, it wasn't afraid to champion causes that it found worthy:

> There are *no* politics in Gardening, and we hold ourselves *perfectly independent* of all parties. Whenever public measures which we approve of relating to Botanical or Horticultural affairs are proposed, they will have our earnest support; and whenever we think them

> wrong, we shall oppose them by every means in our power. (*GC*, Jan. 2, 1841 p. 3)

This often took the form of advocating for the horticultural industry and its place in the world. Most common are comments on proposed use of space in London. In 1841, the editors commented about a proposed new park in east London: “When the ground is selected, we shall take the liberty of offering some observations upon the manner in which is should be planted—a subject of no small importance, which seems to be but indifferently understood, if we are to judge from what has been done in Hyde Park and elsewhere” (*GC*, May 2, 1841 p. 275).

Advocacy crops up in other *Gardeners’ Chronicle* articles. In 1851 Joseph Paxton called for his Crystal Palace, built in Hyde Park for the Great Exhibition, to become a Winter Park and Garden where Londoners could go to exercise: “A building like this will open a wide field of intellectual and healthful enjoyment” (*GC*, July 5, 1851, p. 419). Advocating for gardens as places of public health is still topical. Just this March *Horticulture Week* reported on the NHS’s “healthy new towns” initiative, which prioritised green spaces: “Horticulture industry representatives have been pushing for the health benefits of horticulture and green infrastructure to be recognised more widely (Henry, 2016).

In 1871, the editors of *Gardeners’ Chronicle* report that horticulture was poorly represented at the recent Annual International Exhibitions:

> The Commissioners’ idea of horticulture…seems to us to be confined entirely to its decorative phase. The absence of “gardeners” was commented on in a procession where fishmongers, grocers, vintners…were represented. A deputation from the gardeners of Britain might well have formed part of the procession in a garden which they or their brethren are expected to decorate. It would have been a graceful and fitting compliment to a body of men as fully

> deserving such recognition as any of the workers whose skill and industry are represented" (*GC*, May 6, 1871, p. 578).

After running this article, the Exhibition's Commissioners acknowledged their errors with written compliments and season tickets to the Royal Horticultural Society fellows who had felt slighted.

Today *Horticulture Week* continues to advocate for the horticultural industry. For example, it coordinated a campaign beginning in 2005 to insure:

> That horticulture played a key role at the [London] Olympics and to [make] sure there was a great legacy, as there has been. We worked with other members in the industry and facilitated a discussion across the industry to make sure that we lobbied key players in government to make sure horticulture was a key part of the arrangements of the Olympics (Kate Lowe, Editor, *Horticulture Week*, 2016, pers. comm., 11 March).

This included lobbying for early tree procurement so that growers would have the time they needed to grow trees for the site. Other causes taken up by *Horticulture Week* include getting funding for horticultural research, which led to 13 million dollars of government funding being earmarked for that cause, and a campaign called "Make Parks a Priority" to fight cuts in public park budgets. Such advocacy for the horticultural profession, says Lowe, is "an important part of our history."

Perhaps most important, *Gardeners' Chronicle* always advocated for gardeners, beginning in its first issue:

> The actual condition of Gardeners, and the nature of the education they ought to receive in order to fit them for fulfilling the duties of their station, will constantly occupy our attention…We do think that there is room for very great improvement in a Gardener's education to…raise him in the scale of society. (*GC*, Jan. 2, 1841 p. 3)

Most of the articles in *Gardeners' Chronicle* could be said to serve the purpose of educating gardeners. A frequent theme is that practical education is just as, if not more, important than book learning. With all the focus of cultivating hothouse exotics, there was concern that growing food was seen as an inferior branch of horticulture. In 1853 the Horticultural Society announced a competition for vegetable growing in order to encourage their cultivation:

> But we feel, with others, that in our eagerness to worship the beautiful we have too much forgotten the useful…A gardener is made proficient in getting up a "specimen plant," but knows nothing of a crop of Onions; he can grow an Orchid at Christmas, but lettuce is beyond his skill. (*GC*, May 7, 1853, p. 292)

This focus on practical horticulture continues in 1910 with further criticism that gardeners focus too much on glasshouse cultivation and examinations:

> Things might be much improved here is young gardeners would attend more to the outside part of their profession instead of being so wrapped up in the blue apron and Orchid-house side…There is a tendency nowadays to attach too much importance to the passing of examinations in horticulture and botany, which has the effect of causing young gardeners to think too much of the theoretical, and not enough of the practical side of their profession. (*GC*, May 7, 1910, p. 295).

The theme of practical experience continues into the 1950s:

> To those about to launch into horticulture, we would suggest that while it is very useful to have a knowledge of modern fertilizers, a host of insecticides, hormones, John Innes composts, mechanized equipment and so on, it is of little value if practical commonsense and a grower's instinct of plant's requirements do not go hand in hand. With these

> later priceless attributes, a spade and some dung our forefathers produced admirable crops. (*GC*, May 7, 1955, p. 295).

Conveying practical, science-based advice, reporting on news, and advocating for horticulture and gardeners' education are several ways in which horticultural journalism has remained consistent, as seen through the lens of *Gardeners' Chronicle* and *Horticulture Week*. Kate Lowe sums up the 175 years since Paxton and friends conceived his newspaper: "In many ways, things haven't changed that much. There's that sense of innovation and the sense of wanting to share those ideas, and to raise the standard of the whole industry through education and knowledge" (Kate Lowe, Editor, *Horticulture Week*, 2016, pers. comm., 11 March).

4.5 Changes to *Gardeners' Chronicle/Horticulture Week*

In other ways, the past 175 years have brought major changes to the horticultural journals reviewed for this project. Most obviously *Gardeners' Chronicle* became a true trade magazine, *Horticultural Trade Journal* in 1969, to be renamed *Horticulture Week* in 1986. With this shift, actual practical cultivation advice printed in the magazine began to decline, which surely would have shocked Joseph Paxton, who made it a priority when founding *Gardeners' Chronicle*. As *Gardeners' Chronicle* morphed into the a trade publication this focus all but disappears and now *Horticulture Week* is a "professional and business magazine" (Kate Lowe, Editor, *Horticulture Week*, 2016, pers. comm., 11 March). Plant profiles become restricted to just about one or two feature articles per issue. For example, in the 2012 issue reviewed, the only "Plant Focus" article is on azaleas, and even the thrust of that article is less on cultivation and more on cultivar selection (*Horticulture Week*, May 4, 2012, p. 20). "Plantsmanship" declines over the years, until it is relegated to a single section in the 1960s and 1970s ("Plantsman's Notebook" and "Professional Plantsman"). By the 1980s these columns are gone.

Although cultivation advice decreases, what did increase over the years (from the 1950s onward) is the discussion of the tools, machinery, and chemicals associated with horticulture. This necessitated the introduction of review articles, as discussed in section 4.4, that evaluated and recommended everything from sprayers to irrigation systems to heavy machinery.

Looking strictly at the change in this one horticultural journal, across its name changes, it appears the “art” of plantsmanship has been replaced with how to use machinery. This no doubt reflects the changing culture of gardening since the Victorian era. No longer are hugely wealthy landowners employing casts of thousands to manage their estate gardens and tend the latest exotic plant introductions. Indeed, today’s gardener is more likely to have a window box in their city flat than access to an acre of land, let alone thousands. Much of large-scale professional gardening has moved into the public sphere, where ever-increasing budget constraints necessitate the need to do jobs more quickly and inexpensively than ever before, and often with far fewer staff than in year’s past. Thus it is not surprising that today’s *Horticulture Week* has replaced plantsmanship skills with products and services that promise to efficiently and cost effectively do the jobs it used to take teams of men to manage. One wonders, though, if the decreased emphasis on plantsmanship, as reflected in these horticultural journals, correlates with the loss of prestige for working gardeners. Is knowing how to ride a lawn mower or mix up a tank of chemicals less skilled than hands-on plant cultivation?

When *Gardeners’ Chronicle* morphed into *Horticultural Trade Journal* in 1969, retailing of plants became a new focus of the magazine, with many pages devoted to marketing advice for plant centres managers, reports on various retail outlets, and warnings about U.K. horticulture not being able to compete with the horticulture industries abroad. Again, the focus of the publication became business instead of plantsmanship, with marketing advice replacing cultivation advice. The role of gardener, as seen though *Horticulture Week*, is now not as much about growing plants but about selling them.

Finally, we come to what may be the greatest loss in horticultural journalism: the disappearance of dialogue between gardeners. When Joseph Paxton democratically invited contributions to *Gardeners' Chronicle*, he created a publication completely based on the exchange and debate of new ideas. At that time, "different types of people involved with horticulture communicated with one another much more directly," says Lowe. (Kate Lowe, Editor, *Horticulture Week*, 2016, pers. comm., 11 March). Gardeners wrote entire articles detailing their cultivation methods and technological innovations. The magazine's editors, as well as other gardeners, wrote responses, reporting their experiences and suggesting improvements and alternatives. This dialogue was perfectly suited to horticultural information, when even today so much knowledge is passed by word of mouth. Even Charles Darwin wrote to *Gardeners' Chronicle* over about 30 years to gather information from gardeners to feed into his own research. "You get this sense that the world was smaller then, and there were much more direct links between people who are now more separated." (Kate Lowe, Editor, *Horticulture Week*, 2016, pers. comm., 11 March). Now, instead of an entire publication comprised of gardeners talking to each other, this dialogue is limited to just a few letters to the editor in *Horticulture Week*.

Dialogue amongst gardeners can still be found in specialist publications, says Lowe, such as the Professional Gardener's Guild magazine. And Chris Young, of the RHS *Garden*, attempts to keep some of this horticultural dialogue alive: "We have five pages of comments. And I am really very keen about that because they're all different people, and voices, and I want us to be able to do some of our reflective thinking because there are not many other people doing it." Also lost is the platform for debate that *Gardeners' Chronicle* provided. "We could all do with a bit more top-end science or challenging of or challenging of thoughts or processes or assumptions," adds Young. (Chris Young, Editor, *The Garden*, 2016, pers. comm., 5 February). Should that come to pass, Paxton no doubt would have approved.

There have been other changes in authorship and editors. Whereas contributors to *Gardeners' Chronicle* used to be working gardeners, today most writers who work on *Horticulture Week* have a background in professional journalism, and qualified in horticulture second or not at all. "We're journalists first, whereas when *Gardeners' Chronicle* started up, the contributors were all from horticulture, botany, etc." (Kate Lowe, Editor, *Horticulture Week*, 2016, pers. comm., 11 March). Also of note is that a woman now edits a publication originally created for "gentlemanly" discourse. Indeed, Lowe is not the first female editor of *Horticulture Week,* which may reflect increased opportunities for women in the traditionally male-dominated field of horticulture.

The decline in practical advice, rise of importance of equipment, business and marketing, and loss of between-gardeners dialogue can all be traced to *Gardeners' Chronicle's* evolution into a modern trade magazine. And on a larger scale, these changes reflect the changes in gardening itself, and in its priorities and practitioners.

4.6 In Conclusion: Potential Limitations of this Project

Gardeners' Chronicle/Horticulture Trade Journal/Horticulture Week had a 175-year weekly run totalling nearly 10,000 individual issues. By examining only about 60 of these issues, the conclusions in this paper are necessarily gross generalizations painted with the broadest of brushes. In order to fully understand the changes in horticultural journalism it would be necessary to conduct a more in-depth review of a greater number of articles, which unfortunately wasn't possible given the word-count restrictions for this project.

There is much fascinating material in the sections of *Gardeners' Chronicle* not reviewed, again due to restrictions on the current project. The society proceedings, exhibition reports, and person-to-person correspondence could all be paper topics on their own. By cutting so much content out of review, it is entirely possible that important articles or themes were missed. It is also possible that the dates on which I noticed something beginning or ending in

the magazine are approximate, as I didn't review every issue. When there may be a question I noted this in the text with "in the issues analysed" or something similar.

Similarly, assigning only one category for each article analysed, when the need arose, means that another researcher could possibly examine the same data and come up with a different thesis. This is a hazard, I suspect, of trying to combine aspects of both qualitative and quantitative data analysis into one project.

Because of space limitations I wasn't able to include a thorough discussion of the main subject of these magazines, at least until recent history—plants! An interesting project exists in just examining the species mentioned throughout the history of *Gardeners' Chronicle* and *Horticulture Week*, and evaluating how that evolved. I am certain that much could be gleaned about changing fashions, economics, and technological advancements in cultivation from such a study.

Evaluating advertisements for products and job placements both wanted and advertised could easily form an entire project. The development of illustrations in the journals, from none at all to simple line drawings through to engravings and eventually full-page, four-colour photography would also be worth investigating.

Whole swathes of horticultural history are missed by the limits of this project. Most notable is probably the effect of wars on horticulture, and how the horticulture press played such a big role in the "Dig for Victory" campaigns.

An entire other project could be written comparing today's horticultural journals, and highlighting the rising importance of online publishing, both professional and amateur.

To create a more thorough picture of present-day horticultural journalism, it would be interesting to survey currently practicing horticultural professionals

to determine how horticultural journals affect their jobs. I designed and included a survey (See Appendix E) that could be used to obtain this data in the future.

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