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Paul Stevens
University of Derby

This article shows how hypnosis can provide a useful framework for understanding therapeutic horticulture. Within this framework, data from in-depth interviews with 12 volunteers attending Cherry Tree Nursery—a sheltered work project for people with severe mental illness—provided conceptual groupings of reported experiences: rapport, induction, change in conscious state, relaxation, a safe place, therapeutic change via reframing and symbolic thinking, and confidence boosting. Natural environments and nature-based activities are thus contextualized as spaces and situations within which therapeutic change is more likely to occur. The concept of the restorative environment therefore becomes one component of the overall process—inducing a mental and physical state which is open to change, less egoistic, and socially oriented—but not in itself sufficient to bring about the effects described in the literature. Longer-lasting beneficial effects also require appropriate client-centered guidance, wherein the client creates an internalized environment which endures when they return to their everyday life. The described framework unifies previously disparate therapeutic domains and suggests more focus is needed on 'induction' processes, activities appropriate to the client's mental state, and the settings within which any therapeutic process occurs. Furthermore, cases in which people do not benefit from being in natural environments may indicate incongruencies in concurrent guidance or merit the consideration of a new concept of "nature-susceptibility."

Keywords: therapeutic horticulture, restorative environments, hypnosis, natural environment

Therapeutic horticulture (TH) is "a process that uses plants and plant-related activities through which participants strive to improve their well-being through active or passive involvement" (AHTA, 2012) and has been shown to be effective in diverse populations (Annerstedt & Währborg, 2011; Clatworthy, Hinds, & Camic, 2013; Parkinson, Lowe, & Vecsey, 2011). Beneficial effects include the reduction of stress, obesity, substance abuse, and feelings of isolation, as well as the self-esteem enhancement (Chalquist, 2009). The development of research and theory in this area is part of a change in thinking in health care, with increased interest in the role of the environment, yet it is unclear as to why specific environments can be therapeutic. For some, it is primarily a metaphorical process, akin to using counseling as an adjunct to more mainstream therapy:

Correspondence concerning this article should be addressed to Paul Stevens, College of Life & Natural Sciences, University of Derby, Kedleston Road, Derby DE22 1GB, United Kingdom. E-mail: p.stevens@derby.ac.uk

> [I]t is intuitive to assume therapeutic horticulture would be beneficial to individuals who are metaphorically struggling with the outcomes of poor soil, lack of nurturance, and a lot of ugly weeds choking their fragile growth process . . . some plants fail when trying to thrive on their own, in contrast to a group of plants that were supported by stakes that bound them together for mutual support. (Thomas, 2014, p. 155)

For others, improved mental health is a side effect of the rewarding cognitive and physical challenges of gardening (Stigsdotter & Grahn, 2002) or a combination of personal motivation plus the social support that gardening activities can provide (Parkinson et al., 2011). The physical environment may also have innate qualities which promote beneficial change, with clients valuing the opportunity to "escape" to the outside (Sempik & Aldridge, 2005).

In part, the lack of cohesive understanding arises from the range of theoretical constructs seeking to explain therapeutic effects. At one end of the continuum the focus is on the perceived-as-restorative properties of an objective environment; at the other, the subjective symbology of a constructed 'therapeutic landscape' is key.

Restorative Environments

The construct of *psychological restoration* describes the "renewing [of] diminished functional resources and capabilities" (Hartig & Staats, 2003) and is applied to a place or situation that promotes the baseline recovery of attentional resources and capabilities that have been diminished through stress, overuse, or understimulation. Ulrich's (1983) psychoevolutionary model expanded on this to suggest humans are born with a tendency to show a rapid, positive emotional response to natural environments (Korpela, Klemettilä, & Hietanen, 2002). Some theorists (Falk & Balling, 2010; Orians & Heerwagen, 1992) suggest that these responses relate to the presence of savannah-like features that would have been familiar to, and enhanced the survival of, our evolutionary ancestors. Others propose an innate preference for specific sensory patterns (Spehar, Clifford, Newell, & Taylor, 2003; Taylor et al., 2005), specifically those showing self-similarity (Devaney, 1995).

Alternatively, the more cognitive attention restoration theory (Kaplan & Kaplan, 1989), describes a process of recovery from "attentional fatigue" in environments with three specific qualities: being away from the demands of regular life, having inherently (evolutionary) fascinating sensory aspects, having a sense of extent that connects it to the wider world. In all cases, the environment is emphasized as having the primary role in bringing about therapeutic outcomes.

Therapeutic Landscapes

The geography concept of *therapeutic landscapes,* originally referring to spiritually linked places reputed to have intrinsic healing qualities (Khachatourians), now denotes environments associated with treatment or healing (Gesler, 1992). It includes "natural and human-made environments, historical events, cultural beliefs, social relations, and personal experiences" (Gesler, 1996, p. 95). Rather than a physical environment being key, the emphasis here is on interpretation. A strong positive sense of a place develops through long-term familiarity (a "psychological rootedness"; Williams, 1998, p. 1198) and through its role as a location in which social networks form (Milligan, Gatrell, & Bingley, 2004).

Therapeutic value arises through meeting basic needs of internal cohesion and security and the perception of an established person-place relationship. Therapeutic landscapes, themselves "dependent upon symbolic landscapes which are ever-changing both individually and within society" (Williams, 1998, p. 1197) are subject to change in the long-term as personal and cultural ideas shift. Such landscapes are essentially tools that the therapist can use once they achieve an understanding of the symbolism an individual has used to create a landscape. So here the emphasis is on the individual and, to some extent, the culture of which they are a part.

An Explanatory Gap

Both approaches go some way in explaining the diverse processes involved in TH, yet a gap remains. Restorative environments propose a universal, beneficial response to specific stimuli, with regular exposure showing increased benefits. This focus on individuals and their immediate environment is in line with standard medical models, where mental health issues must be the result of an individual's faulty perceptions—requiring modification of perception and behavior through counseling or cognitive-behavioral therapy—or malfunctioning hardware—treated by drugs or other organic modification. "Take two trips to the plant nursery and you'll feel much better," is a directive that encourages the view that mere exposure to nature is sufficient for therapeutic outcomes, which is an oversimplification of a complex process that those involved in therapy do not subscribe to. "[T]he definition of "therapeutic horticulture" is approaching the issue from the wrong end. Rather, it is the use of horticulture to provide a therapeutic community, where people have time for each other and value and cherish each other" (CTN, 2010, p. 86).

Therapeutic landscapes instead take a more subjective approach, allowing for social and cultural factors that are mostly neglected in the restorative environment idea. However, this means losing the universality aspects of environment-response that the restorative environments literature describes. It is also undeniable that the environment in and of itself can be beneficial (Stevens, 2010).

So this suggests two necessary components of TH:

- a physical environment with properties that promote a relaxing and attention-focusing effect on the individual, and
- the creation of a conceptual/symbolic space within which change is more likely to occur.

Thus, neither the concepts of the restorative environment nor that of the therapeutic landscape can offer a full understanding of TH. What is needed is a framework that combines both, giving additional insights into the nature of the therapeutic relationship in its entirety.

A Different View—Hypnosis

I think a better way to understand the interaction of different factors in TH is to draw parallels with another not-fully understood-yet-effective therapeutic process: hypnosis. Like TH, hypnosis is often misperceived as a standalone therapy, whereas practitioners view it more as "the application of a skill set involving interpersonal, multi-level communication—noticing, suggesting and responding—that is tuned to an individual" (Sugarman & Wester, 2014, p. 7). Hypnosis itself is a facilitator for change rather than

being the only therapeutic component. The TH literature similarly encompasses a wide range of techniques and outcomes:

> Owing to the diversity of activities associated with horticulture and the settings in which it can be carried out, horticulture can be adapted to suit a wide range of clients and it has been used to achieve physical, social and psychological benefits for people with mental health problems, learning difficulties, physical disabilities, survivors of stroke, drug and alcohol problems, social problems and others. (Bragg & Atkins, 2016, p. 25)

Another parallel is with the different elements typically involved in hypnosis:

- the hypnotist as cotherapist who helps the client-as-therapist engage in a process of self-hypnosis rather than being a necessary component (Williamson, 2012),
- the modified sensory focus coupled with a more autonomous (with respect to external reality) mental environment,
- the narrowed attentional states, and
- the creative use of symbolic thinking.

Similarly, in the TH literature, *nature* is

> . . . a co-therapist, helping people to work through their psychological difficulties . . . sensory contact with the natural environment enables connection and communication on a simpler, safer level [which] may in turn lead to opportunities to begin to confront personal difficulties. . . . [S]ex and death . . . are encountered frequently in the garden environment (e.g. through plant propagation and death) and that through this benign contact it may become easier to address the more complex areas of human sexuality and death. (Clatworthy et al., 2013, pp. 215–216)

At this point, there may well be some concern that I am simply conflating two not well understood areas in the "if they are both mysterious, then maybe they are linked" approach—Brooks (2011; para. 1) wittily referred to this as the "conservation of mysteries." Yet, as this article outlines, I think that there is good cause to see parallels—an underlying commonality between hypnosis and humans' responses to natural environments. Research in recent years has enabled a vastly improved understanding of the processes involved in hypnosis, placing it in the context of a continuum of everyday states of consciousness.

So What Is Hypnosis?

Historically, hypnosis has been a controversial topic, but advances in brain imaging techniques like functional MRI have shown it to involve neural activity patterns that distinguish it from simple suggestibility (Wagstaff, 2014), relaxation (Williams & Gruzelier, 2001), role-playing (Mende, 2009), or placebo (Kirjanen, 2012). Hypnosis is associated with lower global functional connectivity and reduced activity in anterior parts of the default-mode network (linked to processes such as task-independent thinking, episodic memory, semantic processing, and self-awareness; Deeley et al., 2012) and increased activity in prefrontal attentional systems (Oakley & Halligan, 2013). Activity patterns correspond to experiences of greater absorption, with less analytical and quieter thought processes (Deeley et al., 2012), and hypnosis has been shown capable of modulating pain perception, visual perception, auditory perception, attention, intentionality and awareness of control (Gandhi & Oakley, 2005).

Although there is continuing discussion as to a formal definition of hypnosis (Wagstaff, 2014; see also commentary articles in the same issue), it is generally thought to involve two main components: induction and suggestion (Oakley & Halligan, 2013). Induction comprises varied instructions asking the participant to voluntarily engage in a particular mental behavior (e.g., "Feel the tension in your eyelids and then let it go") or engage in strategies, such as guided imagery (e.g., "I would like you to imagine you are on a beach"), that change their sensory focus and help them reach the desired state of focused and absorbed attention in which suggestions can be given and benefits obtained. Induction can be via a formal "script" (Brann, 2012), conversational style (Erickson, 1980), or a more situationally based informal process (e.g., a ritual; Richeport, 1985), but all typically involve relaxation or (less frequently) the promotion of an active but stable arousal state (Wark, 2006).

In a therapeutic context, the process includes the following components, typically seen as being important in achieving a beneficial outcome:

- building of a rapport between therapist and client,
- induction of a change in conscious state,
- the establishment of an imagined "special place" or "safe haven,"
- a period aimed at bringing about therapeutic change (often involving guided use of the imagination with realistic or symbolic imagery and suggestions to reframe relevant issues), and
- confidence boosting and other positive posthypnotic suggestions.

The session then finishes with an "awakening" that ensures the participant has returned to their baseline conscious state, i.e., everyday reality.

An Underlying Unity?

The observed parallels in responses to hypnosis and natural environments continue when considering specific psychological and physiological effects. Both hypnosis and natural environment-response show a degree of time distortion (Brown & Katcher, 1997; Naish, 2007), rapid changes in attentional state (Berto, 2005; Grant & Rainville, 2005), and associated electroencephalographic changes. These latter effects include increased activity in the anterior cingulate cortex (Del Casale et al., 2012; Kim et al., 2010) and increased right hemisphere activity (Naish, 2010; Ossandón, Onat, & König, 2014).

Furthermore, natural environments are associated with lowered physiological arousal, reduced pain perception, improvements in confidence and self-esteem, a reduction in affective disorders, and a decrease in egocentric thought and behavior via changes to the self-concept (Chalquist, 2009). Similarly, hypnosis is highly effective in lowering of physiological arousal (i.e., stress relief), pain mitigation, boosting confidence and self-esteem, and in treating affective problems (Williamson, 2012). Part of its therapeutic effect is thought to be via "the experience of a new awareness of self" (Araoz, 2005, p. 126).

Finally, although it is unknown whether exposure to natural environments could directly lead to increased therapeutic suggestibility (as is the case with hypnosis), there is evidence that such exposure is associated with increased creativity via an increased openness to experience and engaging in unconventional thought (McCoy & Evans, 2002). Exposure to such environments has also been shown to decrease self-directed attention (Zhang, Piff, Iyer, Koleva, & Keltner, 2014) – another feature of hypnotic states (Huber, Lui, Duzzi, Pagnoni, & Porro, 2014) – and such a decrease has been shown to be

associated with increased suggestibility (Scheier, Carver, & Gibbons, 1979). People in natural environments may well be in a hypnosis-similar state where they will more readily accept suggestions to reframe problems, use symbols and imagination to change how they feel, and accept more positive thinking.

On the basis of these parallels, a study was undertaken at Cherry Tree Nursery (CTN)—one of the largest therapeutic horticulture projects in the United Kingdom—to explore the utility of a hypnosis framework in understanding the experiences of the people there.

Method

The empirical basis of this study was a set of interviews with 12 volunteers attending CTN. The nursery, part of a Sheltered Work Opportunities Scheme situated in Bournemouth, United Kingdom was established in 1990 to provide "sheltered work rehabilitation, in a supportive but realistic working environment, for people with severe and enduring mental illness" (CTN, 2012). Ethical approval was granted by the University's Psychology Ethics Committee.

Data were collected via in-depth interviews with volunteers who I approached on-site. I had previously given a general talk to volunteers about the idea of ecopsychology (the study of the relationship between humans and the rest of the natural world) and had visited the nursery on several occasions, so I was a semifamiliar and nonthreatening face. There were no selection criteria other than a willingness to talk with me. Qualitative interviews were semistructured and of variable length, depending on the capabilities and patience of the interviewees. Interviews focused on how the interviewees perceived the role that CTN played in their lives, especially those aspects that they found beneficial, and particularly looking at the relative importance of the perceived 'natural' elements in any beneficial experiences.

After a brief chat to explain the format of the interview, permission was asked to record the interview for later analysis. Permission was given by nine interviewees, with another three only feeling comfortable with me taking written notes. Interviews took an ethnographic approach, starting with some basic questions about the reasons for and typical structure of visits, with the rest of the interview being participant led, along with limited interviewer prompting to expand on any unclear aspects. Interviews were one-off and conducted in the setting of the interviewee's choice (often sitting outside). No personally identifiable or demographic information was sought, and sampling of participants was not intended to be representative of the general population but rather to explore the personal experiences of people who were a part of a well-loved project.

Interviewees had been coming to CTN for an average of 11.7 years and typically came for 4 days a week. Four people said they first came after being referred (by doctors and by job center personnel), and another four said simply that they had "heard about" the nursery. One person described a series of synchronistic events that led them to the nursery as if by fate. When asked why they continued to come to the nursery, all gave reasons referring to the uniqueness of the project, the natural elements, the sense of community, and the sense of self-efficacy that being a part of the nursery gave them. Activities in which they were involved covered a wide range, including horticultural, administrative, social support, domestic, skill-acquisition, education and awareness raising, and selling to the public. The majority of favorite activities described were those relating to horticultural activities.

Findings

Establishing Rapport

"Rapport is the most fundamental part of the entire therapy and has been defined as 'sympathy, harmony between individuals, and emotional bond or connection" (Brann, 2012, p. 89).

Stanton (cited in Brann, 2012) suggested that three qualities of the therapist important for successful rapport are genuineness, acceptance of the client, and empathy (seeing things from the patient's viewpoint and sharing an overview of the situation). The primary importance of rapport was obvious at CTN.

The standard procedure for newcomers (Jess, CTN Manager, personal communication August 20, 2008) was to gently talk to them about their real reason for wanting to come to CTN (as opposed to the reason they thought they should have, or had been told). They were then introduced to a few of the other volunteers, those people having been chosen as likely to initiate the group support process, and checked on occasionally. Key elements included the following: an emphasis on belonging, that they were now part of something bigger than themselves; making it clear that all the other people shared similar experiences and would not be judgmental; a recognition that strong friendships and bonds were likely to form and that these could take many forms, not necessarily indicated by verbal interaction. All nursery workers are, at their request, called volunteers: Everyone attends on a voluntary basis because they choose to do so (CTN, 2012).

The effectiveness, and appreciation, of this approach was clear from interviewees:

> Everybody knows there is no need to worry here. . . . If I go and do something stupid in the office . . . I straightaway pick it up and go and say "Look, oh dear," and then we put it right so there's no need to have anything hidden . . . (Participant 2)
>
> She [Jess] is aware of who can do what and maybe its because we come in a few at a time, and she gets to know you. (Participant 9)
>
> Caring people. And everybody looks out for everybody else. And there's an understanding here: If you're having a bad day and you're upset, it doesn't matter. People aren't going to be like, "Ooh, what's up with you?!" Ya know? You can just be yourself here, whether you're having a good day or a bad day, and people accept you. . . . You do not have to explain yourself. If people see you crying, someone will come with a cup of tea, someone will come with a fag. Do you want to chat? No. Do you want . . . ? There's just the support, I mean, just the love. There's just so much love down here. (Participant 8)

The Process of Induction

Although volunteers at CTN (or other TH projects) do not undergo anything akin to formal hypnotic induction procedure, there were parallels with more informal styles. These all related to the specific physical location of CTN: close to a major road but separated from it by a substantial area of woodland and accessed via a small side road that turns through 90° before passing along the edge of a riverside meadow. This screens the road visually and auditorily, increasing the perceived distance from that road. The transition from the busy urban environment to a more natural, tranquil environment is very noticeable and was mentioned by several interviewees:

> I feel better as I walk down the track—off the roundabout and into trees. (Participant 10)
> You have to come round and round and round and round and instead of going up there, where you should be expecting you to go you've got to come round here. It's when I come to the

> field [interviewee's voice softens and slows significantly], it's that field I love. The field is beautiful. When it's got this high with grass, it's absolutely gorgeous. I love grasses . . . the subtle colors through them. (Participant 2)
>
> . . . the general bustle of everyday life then come down slip road and it disappears. As if you're going into another world. Like the past, without the cars. Although you can hear the cars, it's softened, insulated by trees . . . you know it's there but in the distance—like you've gone into another world. Through "mists of time" as I like to call it. Simpler times. Not always, but simpler times when you need it. (Participant 4)
>
> I can hear people's voices, and the wind in the trees. I'm aware of some traffic, but it's not the thing that I notice the most. . . . Just people around, which is a nice feeling, cos I live on my own so it's nice to have people around. (Participant 8)

Here the physical environment coupled with the reduction of adverse sensory stimuli acts in a similar way to guided imagery. Associations are also made between previous positive experiences at CTN and the act of approaching:

> There have been days when I have traveled here crying because I'm having a bad day, and you get to that roundabout and as soon as you turn down there, you just think "I know that I'm going to get some support," and this . . . it's almost like you do a big "Aaaah! [sighs] Thank goodness I'm here." A big sigh of relief. I'm here. I'm safe. There'll be someone to talk to. . . . It just changes you. (Participant 8)

Change in Conscious State

Interviewees also expressed the idea that their "induction by nature" could change their conscious state. Some felt this as a sense of absorption or immersion:

> Good atmosphere. Like another world. Peaceful and tranquil. (Participant 11)
>
> [after leaving the local mental health unit] I walked down the back of the garden, down the [river] bank, with my wellies on and old coat, and came here. And it was wonderful. It was just absolutely wonderful. I could listen to . . . the river going and listen to the birds and all the rest of it, and it was so soothing coming here. (Participant 2)

For one interviewee, this was seen as a widened educational awareness:

> [People] just take [nature] straight in and it's just so nice to broaden their lives. . . . Most people walk without looking at what's around them, do not they? Unless you're the kind of person that likes insects and all the small, little things in life, like the tiny flowers and things like that, you'll walk straight past them. Like Liverwort, when it comes up and flowers—you think how beautiful it is really When you put a magnifying glass to it, you see it in a different light do not you . . . it's things that we haven't been taught at school but probably we all should have been. Cos it's easy to go through school, be ever so clever but also not have any knowledge [laughs]. (Participant 5)

For one interviewee, the experience was one of reciprocity and enhanced communication:

> Plants are soothing . . . plants give you back something if you give them something. And plants they talk to me—I think there's more to plants than people know about . . . they talk telepathically to you . . . you hear plant voices. . . . I was not potting-on one right and it told me off, so ya know, they have feelings, they're a lot like human beings. They have feelings and if you do not treat them right they let you know. . . . (Participant 5)

This kind of experience—accepting events which seem unusual in everyday reality—is common in hypnosis. Participants often take the literal sense of what they are told, despite logical incongruencies ("trance logic") and engage in "vivid and seemingly real imaginative experiences" (Hilgard, 1970). It is also interesting to compare this experience with that of indigenous healers around the world, who talk of "plants that teach," often while in altered states of consciousness (Jauregui et al., 2011).

Relaxation

Next, as is typical in hypnosis, interviewees tended to report that they experienced a state of increased relaxation. Supporting the idea of innate de-arousal responses to natural environments (Kaplan & Kaplan, 1989; Ulrich, 1983), all of the interviewees' references to feeling relaxed were explicitly linked to natural features found at CTN:

> If I'm doing letters or putting things together or . . . I feel as if I really have to be focused and concentrate on what I'm doing whereas with a tray [of plants] it doesn't matter if you drift off for a minute cos you can come back to it. It's more relaxing. (Participant 8)
>
> Minds are cluttered with all sorts of things so watching wildlife doing its thing takes your mind off things just for a while. There's a lot of pleasure in it. (Participant 4)
>
> I do like the water. y'know it's quite peaceful cos . . . I do not know . . . You just look at the water. It looks calm and they've got nice plants around the area. And it does make a noise . . . a nice trickling sound. . . . You just relax. (Participant 1)

Establishing a "Special Place."

The idea that CTN had become a special place or safe haven was a common one among interviewees and something I often heard when visiting:

> Cherry Tree is a haven . . . from the stress and strains of normal, so called normal life. And it can be tranquil, and it can be busy. So whatever your mood, there's something you can relate to. (Participant 3)
>
> There's none of the hustle and bustle of everyday life. . . . Sort of like part of the world but a pocket. A haven pocket. (Participant 4)
>
> There just seemed to be a sense of calm here. I do not know, I mean, it's quite chaotic but there was just this . . . it just felt like a nice place to be. (Participant 8)
>
> It should never, ever be closed, because there is always going to be someone who desperately wants a place like this to come to. Because it is a bit of a salvation sort of place, and I just think there should be a few more places like this, for every country, not just here. Just somewhere where people can come who are not so sure of themselves and just come and feel quite safe, just for the day, if they haven't got that at home. Everyone needs some sort of security. (Participant 5)

For some, the special place is based on a positive first impression:

> I came on a visit, and it was summertime, and there were people outside, and there seemed to be a very happy atmosphere, and I thought, "Oh this is great." (Participant 3)

Yet it seems to go beyond the immediacy of being in that place, volunteers often expressed the idea that CTN was something that they carried around inside of them as a buffer against stresses in the everyday world; an internal place that itself can be used as a refuge in troubling times:

> There's a Cherry Tree spirit that just captures you when you come here . . . It is something just within you. (Participant 8)

> When you first come, your mind is all jagged and you do not really know where you are . . . in terms of your life, your pattern in life. . . . 'Cause I believe there are circles in life, and this is a very important part of it. I'd be lost without it, and it's kept me out of hospital at least three times. (Participant 3)

This was reinforced by a couple of volunteers who told me that they felt they no longer needed to come to CTN as often because knowing it was there, and they were a part of it, was enough to sustain them. Thus, whether it is the actual physical environment or the internalized representation, CTN serves a similar purpose as the hypnosis special place: somewhere to feel relaxed and safe that acts as a starting point for therapeutic change (Brann, 2012).

Therapeutic Change: Reframing

The reframing of individual problems, and of the stigma often felt about mental health issues, was something that most interviewees described. For many, the first and most fundamental reframe was from describing and seeing themselves as a "patient" to "I'm a volunteer at Cherry Tree Nursery":

> I am so passionate about this project, and the stigma of mental illness is just. . . . I mean, my parents have learned a lot through me, and they come down here now and they help out, and they integrate with the volunteers, and you just want to get the message out: 'Come in, and we're not mad—we're normal human beings. Yes, we've had difficulties and problems, but a lot of the public come in and say, "Oh, are you staff? Are you a volunteer? But you cannot be a volunteer." Well, I am a volunteer, and people do not know the difference, and that is a good thing. (Participant 8)

This not only helps to remove the stigma of other people seeing you as "mentally ill," but also helps the volunteers release their own biases and see their illnesses in a more positive light:

> The first thing that struck me was that people were laughing, and I thought, "How can people be laughing if they've got mental illness?" I couldn't understand that people were happy, and that they were laughing, and I thought, "I want a bit of that! I want to be able to do that again." (Participant 8)

> I'm actually glad I became mentally ill because I found Cherry Tree. (Participant 12)

> This is the place where I'm meant to be in life, 'cause I know I can do a lot of good here. (Participant 5)

Therapeutic Change: Symbolic Thinking

The use of symbols by interviewees also spontaneously occurred on several occasions:

> I also love cutting the hedge at the back, that's nice. . . . Yeah, that's quite therapeutic . . . 'Cause when I cut dead plant off, it's like me getting rid of my problems. They cut off as well; you know what I mean: You're cutting off your problems. . . . (Participant 1)

> I see [CT] as an ant's nest actually, cause there's that little world that's doing its little [things], and all around there's lots of little worlds, and I'm in my little world. . . . I really do not have much to do with anybody else. I do not know what else goes on cos I come

> just one day a week, but they are all independently working—it doesn't mean [a member of staff] doesn't have to come out and say, "Come on then you lot, you've got to . . ." because they've joined in that bit of the nest, and they belong in that bit of the nest, and then they come out with, "D'you know, it'd be ever such a good idea if we . . ." So we feed it up: "Wouldn't that be a good idea?" "That's an excellent idea, meets with everybody's approval, get on and do it," and "It's wonderful." So, it's dynamic from that point of view . . . it's just magic. (Participant 9)

However, the symbols are not always necessarily positive ones:

> It's to do with the seasons, or something. Y'know, wintertime, we feel lower, cos nothing's going on, and when spring does start, you have another element . . . we're all seeing the plants are growing . . . so we ought to be growing or feeling better . . . but we do not get better as quickly as the plants do, and that's a very negative, depressing few weeks. (Participant 9)

Yet, as Clatworthy et al. (2013, p. 216) stated, negative affect symbols can also be therapeutic, representing a "benign contact" that may allow the person to better address the more complex version of such issues that are encountered in everyday life.

Confidence Boosting

Confidence boosting involves "anything which boosts the patient's positive beliefs in themselves, increases self esteem and helps the patient tap into inner resources" (Brann, 2012, p. 141). As such it was an obvious element in the CTN ethos—their stated aim is "to create a loving community for people who often feel frightened, lonely, isolated and powerless" where "confidence is boosted through the knowledge that all play a part in keeping a thriving, popular and successful nursery project running" (CTN, 2012). The reframing to "volunteer" described earlier is one way in which this is achieved, but it goes further than that. Several interviewees emphasized the lack of an obvious hierarchy between staff and volunteers:

> When I first come here, I worked here for 3 months and I thought, I didn't realize the boss was Jess. I thought she was one of the volunteers. (Participant 5)

> . . . there isn't an us and them really. We are aware that some people get paid and some people do not get paid, but it doesn't feel like an us and them scenario, and it doesn't come down from the top as an us and them. And so you go for guidance to whoever is suitable to you. . . . There are categories . . . you can be a volunteer, you can be a friend, you can be a member of staff, you can be a part-time member of staff—but they seem to merge, and anybody is allowed to ask for the support of any of the others. (Participant 9)

> Why does it work? I think because everybody here has gone through some kind of breakdown, trauma, or whatever, and I think that makes people kind of ungeneralizing. (Participant 8)

Another confidence booster is the use of the plants that are grown and potted-up by volunteers as visible reminders of achievement. Volunteers label their plants with personally identifiable tags to track their progress:

> It was just lovely to see the plants take off, and then as you go down the nursery and you can see your pot with your stick in it and, "Oh look, it's grown a bit more!" . . . just to follow it through. (Participant 8)

> You can produce a plant . . . and it grows up . . . it's nice really because you can see it's something, and it's growing and then it gets sold. That's what I like about it. (Participant 1)

> It's the process . . . from cutting the cuttings, to propagation, to potting on . . . and then selling them . . . 'cause it's a very productive thing and it gives everybody a taste of contributing to

> the work here, and it ties it all together, and people can be proud of the achievements they've done. It's a bonding thing. (Participant 3)

This bonding—making supportive relationships with each other and feeling that you belong to something bigger than yourself—is prominent when visiting CTN and was a common theme expressed by interviewees:

> I only came here to prove to [my Community Psychiatric Nurse] that nobody would want me . . . but then they took me straight away. . . . When I first started coming, I couldn't speak to anyone, and as time went on, I started to talk to a few people and then you're just embraced in this family. It's great. . . . You're working toward keeping the place going, you're looking out for other people. There's just a sense of community, and yeah, a sense of belonging. (Participant 8)

> I think building relationships is an important part of being here and I've made some good friends since I've been coming . . . people I wouldn't normally have met. (Participant 3)

> [the people here] they've all got hearts of gold, they've just had some hard times . . . you have to come and work here to understand it really. And what we just take for granted in our lives—if someone gets an envelope coming through their door, it's so big for them that they cannot even open the envelope. Y'know, you will not see them for ages, and then when you do see them, they're a nervous wreck. . . . It opens your eyes, but you have to come into this environment. (Participant 5)

Once again, there seems to be an interplay between the natural features of the environment—especially the use of plants—and the social support. Just as with hypnosis, the therapeutic effects come about via the social relationship of the hypnotist and the client, not just from the hypnotic procedure alone. And also as with hypnosis, CTN volunteers carry forward the positive expectations gained from confidence-boosting to their next session:

> I open up the gates . . . it's just nice . . . you do not know what you're going to see next really . . . there's always something for that day. (Participant 5)

Discussion/Conclusions

Using a hypnosis framework, the role of natural environments and nature-based activities within therapeutic horticulture are contextualized as spaces and situations within which therapeutic change is more likely. Although the responses that humans have to natural stimuli are in themselves beneficial (e.g., the restorative environment perspective and analogous to the relaxation plus positive emotion effects of hypnotic induction), this is not in itself sufficient to bring about the more comprehensive effects seen in the TH literature. A hypnosis framework offers the insight that natural environments might act to induce a mental and physical state which is more open to change, less egoistic and more oriented toward social interactions (which, as others have pointed out, includes interactions with nonhumans as well). With the right guidance and facilitation, this change is beneficial and can be long-lasting: an internalized environment which the person takes with them when they return to their everyday life.

Modeling therapeutic horticulture as a hypnosis-like experience has several advantages. In unifying previously disparate therapeutic domains, this approach offers potential avenues of research to explore underlying meaning and experiences, potentially leading to refinements and novel techniques that could be employed in each domain. For example,

- gaining an awareness of the importance of the induction process at therapeutic horticulture sites;
- learning to recognize when a therapeutic horticulture client has undergone a change of conscious state and engaging in state-appropriate activities (i.e., focusing on building rapport before a state-change, and on therapeutic or ego-boosting activities after a state-change);
- recognizing the importance of positive, affirming interactions, whether formal or informal, within therapeutic horticulture. Within hypnosis, positive suggestions—such as "I am calm"—are more effective than negative suggestions—such as "I am not anxious"—so a similar approach should be taken whatever the medium: working toward a positive rather than away from a negative.
- Emphasizing nature-based imagery within hypnotherapy sessions might be more beneficial than alternate imagery (although, anecdotally, many therapists I have talked to have already discovered that such imagery is both effective and popular with clients).
- Focusing on the settings within which hypnotherapy takes place, increasing the presence of natural restorative stimuli through choice of decor, wall paintings, window views, or even (as I do in my own practice) combining hypnotherapy with walks within natural environments.

Furthermore, the use of a hypnosis framework expands on the literature of restorative environments by suggesting how beneficial effects might be induced from mere exposure to a natural environment but also offers insights into anomalous cases where people do not benefit. In such cases, it may be that there is no concurrent guidance or support, or, where it does exist, it conflicts with the environment in which the therapy occurs—analogous to a therapist who uses contradictory approaches within a single session, or a client who is seeing multiple therapists who give contradictory suggestions. Alternatively, a lack of success might be due to individual differences (psychological or physiological) which affect the magnitude or efficacy of the nature response (beyond mere relaxation, which has been shown to be a robust effect in a variety of populations—Maller, Townsend, Pryor, Brown, & St Leger, 2006). This would be analogous to the variance observed in hypnotic suggestibility (Montgomery, Schnur, & David, 2011). Perhaps the degree to which a change in conscious state occurs within the client depends on the frequency with which they have encountered restorative environments so that, to some extent, therapeutic response to specific environments may be a skill which is learned and so can be improved, as is the case with hypnotic responding (Gorassini, 2004).

In summary, an understanding of hypnosis is also useful for exploring the complexity of the processes involved in therapeutic horticulture, providing conceptual groupings of reported experiences, and emphasizing reframing as a key issue. Further research focusing on the parallels between hypnosis and therapeutic horticulture is needed to better explore whether there are direct links between the nature-response and hypnotic state, but the advantages that are outlined in this article show that comparing the two domains is a useful approach even if the underlying psychophysiology turns out to be different.

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Author Note

Paul Stevens, PhD, is a part-time senior lecturer in psychology with the University of Derby, United Kingdom, and a practicing hypnotherapist (NaturalResourcesWellbeing-.com). He is also a director with the National Council for Hypnotherapists (hypnotherapists.org.uk) and the Centre for Human Ecology (www.che.ac.uk). His interdisciplinary research combines interests in the psychology, physiology, and physics of altered states of consciousness, embedment in the environment, and experiences currently deemed "anomalous." Some of the ideas in this article relating natural environments and hypnotic states formed part of presentations at the British Society for Clinical and Academic Hypnosis conference (Staffordshire University, 2014), Nature Connections (Derby University, 2015) and the European Society of Hypnosis Congress (Manchester, United Kingdom, 2017).

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