

# Goldsmiths Research Online

*Goldsmiths Research Online (GRO)  
is the institutional research repository for  
Goldsmiths, University of London*

## Citation

Chamberlain, Rebecca and Pepperell, Robert. 2021. Slow Looking at Slow Art: the Work of Pierre Bonnard. *Leonardo*, 54(6), pp. 615-618. ISSN 0024-094X [Article]

## Persistent URL

<https://research.gold.ac.uk/id/eprint/28504/>

## Versions

The version presented here may differ from the published, performed or presented work. Please go to the persistent GRO record above for more information.

If you believe that any material held in the repository infringes copyright law, please contact the Repository Team at Goldsmiths, University of London via the following email address: [gro@gold.ac.uk](mailto:gro@gold.ac.uk).

The item will be removed from the repository while any claim is being investigated. For more information, please contact the GRO team: [gro@gold.ac.uk](mailto:gro@gold.ac.uk)

# Slow Looking at Slow Art: the Work of Pierre Bonnard

Rebecca Chamberlain (educator): Goldsmiths, University of London, 8 Lewisham Way, New Cross, London, SE14 6NW, UK. E-mail: [r.chamberlain@gold.ac.uk](mailto:r.chamberlain@gold.ac.uk)

Robert Pepperell (educator), School of Art & Design, Cardiff Metropolitan University, 200 Western Avenue, Cardiff, CF5 2YB, UK. Email: [rpepperell@cardiffmet.ac.uk](mailto:rpepperell@cardiffmet.ac.uk)

## Author biographies

Rebecca Chamberlain is lecturer in the Department of Psychology, Goldsmiths, University of London. Rebecca's research focuses on the psychology and neuroscience of the production and perception of visual art.

Robert Pepperell is an interdisciplinary researcher based at Cardiff School of Art & Design who integrates art, science, and philosophy to investigate the nature of perception and consciousness.

## Abstract

Slow looking is an increasingly prevalent strategy for enhancing visitor engagement in the gallery, yet there is little research to show why looking at artworks for longer should be beneficial. The curator of a recent exhibition of Pierre Bonnard at the Tate Gallery in London encouraged viewers to look slowly in order to enrich their experience of his paintings. This article explores some of the reasons why Bonnard's work in particular rewards the viewer who spends more time studying it. Our account draws on various scientific studies of the ways in which observers process colour contrasts, spatial configuration, and figure-ground segregation in artworks and in everyday vision. We propose that prolonged interactions with works of art can facilitate perceptual learning, and suggest ways in which these effects could be empirically studied using psychological methods.

## Introduction

The 'Slow Movement' has garnered much attention in recent years, often promoted as an antidote to increasingly frenetic lifestyles. 'Slow Art' is informed by visual thinking strategies which focus on the development of visual literacy through looking deeply at and discussing

visual art [1] and organisers of Slow Art events typically asks that gallery visitors look at a series of five paintings for ten minutes at a time, and then discuss their experience with others. Slow Art is motivated by the observation that gallery visitors spend an average of only 27 seconds in front of an artwork, with viewing times of 5 minutes or more a rarity [2, 3]. But this apparently brutal statistic belies more complex patterns of viewer behaviour in museums. For example, recent studies have shown that viewing times are modulated by the number of artworks in a museum context [4], by how ambiguous an artwork appears [5], and by whether the visitor is viewing the artwork alone [6. See Carbon [3]]. Nevertheless, the growing popularity of the Slow Art movement suggests that viewers find prolonged viewing of non-time-based works beneficial.

To date there has been little empirical research on the psychological consequences of prolonged interactions with artworks. Laboratory studies directly addressing the impact of viewing time on aesthetic experience rarely include inspection times exceeding one minute, and are therefore unlikely to capture the kinds of psychological effects induced by looking at an artwork for ten minutes or more. Subjective accounts of slow looking at art exist, but these are highly heterogeneous in their approaches and outcomes [7--9].

In this article, we focus on work of the painter Pierre Bonnard shown in 2019 at Tate Modern in London. Pierre Bonnard was a member of a group of artists named 'Les Nabis' credited by art historians with ushering in a bold and simplified pictorial approach to pictorial design that served to bridge impressionism and modernism. Bonnard's way of working was somewhat unusual for artists of his milieu; he did not paint directly from life but tried to reconstruct his recollection of the first impression of a scene, often prompted by small observational sketches [10].

We propose that certain visual and stylistic features of Bonnard's paintings particularly encourage and reward prolonged study. These features are by no means unique to Bonnard, but we argue they are especially pronounced in his work, and so help to exemplify and explain why viewers can benefit from slow looking. It may have been for these reasons that the curator of the exhibition, Matthew Gale, chose this show to promote the value of slow looking, stating that Bonnard's paintings, 'really reward very close and extended scrutiny' [11]. Gale may have been aware of earlier comments by the artist Sargy Mann, who, in an article on Bonnard's work also suggested that the observer should spend time with the work to be fully rewarded,

“sitting here looking at a reproduction of *Le Cannet* for some time, I begin to experience again what I have seen before in front of the original in Paris: a growing enveloping vastness of earth and sky; and with it the glorious colour transmuting into an even more glorious light” [12].

In the following sections, we discuss why it is that Bonnard’s work lends itself to slow looking, with reference to his often-disorientating use of colour, space and figure/ground relationships. We examine several features of the works that have particular perceptual and cognitive effects, and provide directions for future research which may further characterise the phenomenon.

### **Colour Contrast**

Like other progressive painters, Bonnard departed from the naturalistic colour palette that had dominated much nineteenth century French art, opting instead for more expressive high key hues and strong colour contrasts. Bonnard likely drew on earlier strategies of colour adopted by the Impressionists, who were strongly influenced by Chevreul’s writings on simultaneous colour contrast [13]. Simultaneous colour contrast entails that complementary colours enhance each other when placed adjacently on the canvas, and this technique was put to strong effect by Bonnard in paintings such as ‘*Salle à manger dans les Jardin*’ (Fig. 1). In this image, the colour contrasts between the door and wall on the left of the painting or the woman’s jacket and the landscape behind her are particularly striking. It has been suggested that placing emphasis on colour contrast serves to maintain colour constancy in the face of ambiguous lighting conditions within a painting [14]. But by placing such strong colour contrast towards the periphery of the painting Bonnard may have been deliberately preventing us from privileging the centre of the image, where the main motif is traditionally located. The consequence is that we tend to divide our attention more broadly across the picture plane, scanning the space in a way more in keeping with the natural behaviour of vision in a real three-dimensional scene.



Figure 1. Pierre Bonnard, *Salle à manger dans le jardin* (*Dining room in the garden*), oil on canvas, 164 x 206 cm, 1934-5. Minneapolis Institute of Art.





Figure 2. Pierre Bonnard, *Salle à manger sure le jardin (Dining room on the garden)*, oil on canvas, 127 x 134 cm, 1934-5. Shown in both colour and monochrome. Solomon R. Guggenheim Museum (© 2018 Artists Rights Society (ARS), New York/ADAGP, Paris)

Bonnard frequently used equiluminant colours in his work, that is, colours which are similar in lightness but opposing in hue. This can create a somewhat vibratory perceptual effect, as can be seen in Fig. 2, especially in the flowers on the right. Here the colours have high colour contrast but low luminance contrast, as is seen when the painting is converted to grayscale and the flowers all but disappear. The processing of colour in the brain is divided between visual pathways responsible for the processing of luminance (the ventral stream) and chrominance (the dorsal stream). The chrominance channel is relatively poor at determining location and movement [15]. Therefore, a region that is equiluminant to its background or an adjacent figure will be difficult for the visual system to locate precisely, thus causing the region to appear to move or dance upon the background [16]. Research conducted on drawings by Henri Matisse containing doubled and shifted boundary and colour contours found that when a boundary contour is equiluminant with a colour contour their roles as boundary or colour contours appear subjectively unstable and easily reversible. This creates further ambiguity about the location of figure and ground [17]. Bonnard may have deliberately used equiluminance to create a sensation of indeterminacy and dynamism within the figure-ground boundaries (both in terms of their location and in their relative roles). This further encourages the viewer to spread their visual attention across the painting in order to deconstruct the complex pattern of implied three-dimensional structures.

### **Matching pictorial space to perception and memory**

Bonnard's working method predominantly involved painting from memory in order to capture the first moment of perception of a scene. In a recent study, Bainbridge and colleagues asked non-expert participants to draw a series of scenes after viewing them for a brief time [18]. They found that the resulting drawings tended to have good spatial accuracy, but they also discovered systematic spatial inconsistencies in the drawings across participants. Participants extended the boundaries of the scenes, and drew them as if the observer were further away than in the original image, so effectively increasing the field of view of the remembered image. Many of Bonnard's

paintings display this tendency towards wider fields of view, and this may help the attentive viewer to feel more immersed in what might seem to be a more complete and expansive space.

In fact some of Bonnard's paintings depict extremely wide-angle views; up to 180 degrees horizontally (the full width of the human binocular visual field), which is unusual for scenes of still life and interiors. Wide-angle views cannot be depicted using traditional methods of linear perspective without unnatural looking distortions [19]. Bonnard avoided using linear perspective in favour of more natural perspectives that replicated the way objects are remembered rather than their literal geometric form. An example can be seen in Fig. 1, where a very wide-angle view of a scene that is taken in by the whole visual field at once has been rendered with a seemingly natural appearance.

In paintings such as 'Le Bol de Lait' (Fig. 3) we note an inconsistency between the perspectives used to render the tables and that used to render the figure; none belong to a geometrically unified space, of the kind created by photographs or strict application of linear perspective rules. Nevertheless, each object appears quite natural when studied individually, which suggests they have been individually recreated from memory and so appear in the painting more as we might imagine them to look than as they would look if rendered with optical consistency.

In addition, research on Cézanne and laboratory studies of artists has also highlighted a tendency of artists to enlarge the central area of the visual field compared to the peripheral areas, which can to some extent be explained by the curvature of the eye and the neural organisation of the early visual system [20]. Importantly, paintings that reflect this perceptual structure are reported as being more accurate representations of visual space in comparison with other perspectival systems [21]. Similar patterns of spatial organization can often be found in Bonnard's work [22] and serve to enhance the sense of intimacy and presence engendered by close study of his paintings.



Figure 3. Pierre Bonnard, *Le Bol de Lait (The Bowl of Milk)*, oil on canvas, 116 x 121 cm, 1919. Tate Modern (© Tate. <https://www.tate.org.uk/art/artworks/bonnard-the-bowl-of-milk-t00936>)

### **Ambiguity of Form and Figure**

The indeterminacy between figure and ground often found in Bonnard's work, such as in the female figure in the right of Fig 2, suggests that he was keenly aware that our subjective experience of discrete objects standing out against backgrounds is as much a product of visual processing as it is a property of the world itself. Bonnard often challenged the robust illusion of figure-ground relations by making it difficult for the viewer to isolate objects and figures from the brightly coloured and heavily patterned backgrounds of the paintings. In doing so, he downplays the importance of any single pictorial element and evokes the indeterminacy of the first gist of perception, in which the layout of the visual scene has not yet been resolved. The sudden emergence of the 'hidden figures', often lurking in the peripheries of Bonnard's paintings, is one of the pleasures that come from extended viewing.

Gestalt psychology argues that figure-ground relationships are determined by relationships between visual properties such as grouping, convexity, symmetry, contour and enclosure [23]. Prior experience strongly drives figure-ground segregation, as familiar figures are more quickly



segregated from backgrounds than novel figures [24]. Neurons in the Primary Visual Cortex (V1) of the brain seem to respond more strongly to figures in contrast to ground regions on the basis of colour, orientation, motion and depth, suggesting that figure-ground segregation is an early, generalised and fundamental function of the visual system [25. See Wagemans [23]]. Furthermore, there is evidence that the process of figure-ground segregation relies heavily on border ownership (whether a contour belongs to figure or to ground) [26. See Wagemans [23]]. By ambiguating many of these figure-ground relations, as he does frequently in Fig. 2 (note the ambiguity between the boundaries of the vase on the right and the woman's dress) Bonnard frustrates a very basic set of visual processes, heightening the sense of visual indeterminacy.

Research suggests that visual indeterminacy in artworks leads to longer dwell times, and stronger aesthetic responses, implying that expending effort in trying to decode artworks, leads to a richer experience [27]. By making it difficult to extract figure from ground, Bonnard invites the observer to actively search for figures, encouraging slow looking. In a sustained attempt to resolve the visual scene, observers often experience pareidolia in Bonnard's work, falsely detecting a signal (i.e. a figure or face) instead of noise. This phenomenon has also been shown to occur more frequently in a set of indeterminate paintings in comparison to representational paintings [28. See Ishai [27]]. Pareidolia occurs due to the same mechanisms of prior experience that drive figure-ground segregation; the top-down components of visual system continuously impinge expectations of what is present in the visual scene.

### **Slow looking and perceptual learning**

We have proposed that certain features of artworks, as exemplified in the paintings of Bonnard, invite contemplation for longer than might otherwise be the case, and that this prolonged viewing has certain perceptual consequences and potential rewards for the viewer. It should be acknowledged, however, that some people, because of their educational or cultural backgrounds, might feel congenitally incapable of engaging with seemingly 'difficult' artworks that require a significant investment to fully appreciate, and this will discourage them from participating in Slow Art activities. In response, the case can be made that appreciating the power and pleasures of art is a skill that can be learned and cultivated, in the same manner as appreciating fine wine or unfamiliar music. Acquiring a new skill, of course, inevitably takes time and effort, and this is

because it involves a process of reconfiguring the patterns of neural behaviour that underpin our mental processes. The psychologist James Gibson, who was fascinated with art and how pictures affect us, developed a theory of perceptual learning based on the idea that there is no limit to how sensitive our senses can be,

“The eyes and ears are not fixed-capacity instruments, like cameras and microphones, with which the brain can see and hear. Looking and listening continue to improve with experience” [p. 269, 29]

According to Gibson, the world offers us an “inexhaustible reservoir” of rich visual content that becomes ever richer the more we attend to it. This is because we are effectively training our visual system to be more alert to features that we might otherwise ignore. Artists, it could be argued, do the very same thing when learning to draw and paint from the world. People who learn to draw are really learning how to see again, that is, to see the world with a heightened intensity and vividness. When they successfully record what they see in paint or graphite or pixels then we, as their audience, are invited to share in this heightened sensory experience [30. See Pepperell [22]].

In fact, there is evidence that artists’ perceptual experiences can differ significantly from those in everyday perception in so far as they tend to focus on certain visual properties of shape, texture and tone in the visual world that are normally registered only subliminally [31]. This can be reflected in the eye movement patterns of artists when they look at representational artworks, where they have been shown to make more distributed eye movements [32] and place greater perceptual focus on background elements and spatial relations between objects compared with novices [33]. By developing their visual sensibilities in this way artists not only prove how mutable and reformable our visual systems are but also, since they contain a highly filtered and expertly organised set of visual properties, why the works they produce may bear closer and longer scrutiny than other forms of depiction.

## References and Notes

1. A. C. Housen, “Aesthetic thought, critical thinking and transfer,” *Arts and Learning Research* **18**, No. 1 (2002) pp. 99–132.

2. J. K. Smith and L. F. Smith, "Spending time on art," *Empirical Studies of the Arts* **19**, No. 2 (2001), pp. 229–236.
3. C-C, Carbon, "Art perception in the museum: How we spend time and space in art exhibitions." *i-Perception* **8**, No. 1 (2017).
4. A. W. Melton, *Problems of installation in museums of art*. (Washing, DC: American Association of Museums, 1935).
5. D. Brieber, M. Nadal, H. Leder and R. Rosenberg, "Art in time and space: Context modulates the relation between art experience and viewing time". *PloS one*, **9**, No. 6 (2014), p.e99019.
6. Carbon [3]
7. T. J. Clark, *The sight of death: an experiment in art writing*. (New Haven, CT: Yale University Press, 2006)
8. B. S. Funch, "An Extended Look at Art," *The Journal of Aesthetic Education* **53**, No. 1 (2019), pp. 106.
9. A. Reed, *Slow art: the experience of looking, sacred images to James Turrell* (Oakland, CA: Univ of California Press, 2017)
10. M. Gale, *Pierre Bonnard; The colour of memory* (London, UK: Tate Publishing, 2019)
11. M. Brown, "Tate recommends "slow looking" at major Pierre Bonnard exhibition," *The Guardian*. (2018, July 23).
12. S. Mann, "On Bonnard," *The Artist Magazine*, (1981), pp. 26–31.
13. M. E. Chevreul, *The principles of harmony and contrast of colours, and their applications to the arts*. (London, UK: Longman, Brown, Green and Longmans, 1855).
14. P. Mamassian, "Ambiguities and conventions in the perception of visual art," *Vision Research* **48**, No. 20 (2008), pp. 2143–2153.
15. M. S Livingstone and D. H Hubel, "Psychophysical evidence for separate channels for the perception of form, color, movement, and depth," *Journal of Neuroscience* **7**, No. 11 (1987), pp. 3416–3468.
16. M. S. Livingstone, *Vision and art: the biology of seeing*. (New York, NY: Harry N Abrams Inc, 2002)
17. B. Pinna, The organization of shape and color in vision and art. *Frontiers in Human Neuroscience* **5** (2011)

18. W. A. Bainbridge, E. H. Hall and C. I. Baker, “Drawings of real-world scenes during free recall reveal detailed object and spatial information in memory,” *Nature Communications* **10**, No. 1 (2019)
19. R Pepperell and M. Haertel, “Do artists use linear perspective to depict visual space?” *Perception*, **43**, No.5 (2013), pp. 395–416.
20. R. Pepperell, R and L. Hughes, “As seen: Modern British painting and visual experience,” *Tate Papers* **23** (2015, Spring).
21. J. Baldwin, A. Burleigh and R. Pepperell, “Comparing artistic and geometrical perspective depictions of space in the visual field,” *I-Perception* **5**, No. 6 (2014), pp. 536–547.
22. Pepperell, R. (2016). Always Learning to See: The Art and Thought of Sargy Mann, *Art & Perception*, 4(4)
23. J. Wagemans, J. H. Elder, M. Kubovy, S. E. Palmer, M. A. Peterson, M. Singh and R. von der Heydt, “A century of Gestalt psychology in visual perception: I. Perceptual grouping and figure–ground organization,” *Psychological Bulletin* **138**, No. 6 (2012), pp. 1172–1217.
24. J. Driver and G. C. Baylis, “ Edge-assignment and figure–ground segmentation in short-term visual matching,” *Cognitive Psychology* **31**, No. 3 (1996) , pp. 248–306.
25. Wagemans [23]
26. Wagemans [23]
27. A. Ishai, S. L. Fairhall and R. Pepperell, “Perception, memory and aesthetics of indeterminate art,” *Brain Research Bulletin* **73** (2007), pp. 319–324.
28. Ishai [27]
29. J. J. Gibson, *The senses considered as perceptual systems* (Oxford, UK: Houghton Mifflin, 1966)
30. Pepperell [22]
31. G. C. Cupchik, *From perception to production: A multilevel analysis of the aesthetic process*. In *Emerging Visions of the Aesthetic Process: Psychology, Semiology, and Philosophy* (Cambridge, UK: Cambridge University Press, 1992) pp. 83–99.

32. W. H. Zangemeister, K. Sherman and L. Stark, "Evidence for a global scanpath strategy in viewing abstract compared with realistic images," *Neuropsychologia*, **33**, No. 8 (1995) pp. 1009-1025.
33. Vogt, S., & Magnussen, S, "Expertise in pictorial perception: Eye-movement patterns and visual memory in artists and laymen," *Perception*, **36**, No. 1 (2007), pp. 91–100.