

Interest in Lotze

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Interest alone gives accent and emphasis, light and shade, background and foreground – intelligible perspective, in a word.

– William James, *The Principles of Psychology I* (1890), 402

1. Introduction: Power, Strength, and Interest¹

Presentations ('Vorstellungen' in the terminology of Lotze and his contemporaries) do not merely represent something; they also have the power to inhibit or strengthen other mental representations. Is this power an intrinsic property of a presentation (or grounded in such a property)?

Herbart and, following him, many nineteenth-century German philosophers and psychologists answered "yes" to this question. Just as a physical body has a certain mass, an intrinsic categorical property of a certain magnitude, which explains the body's resistance to forces, mental presentations were thought to have *strength*, an intrinsic magnitude that explains the presentation's powers.² According to Wundt (1874, 6), "sensations, presentations and feelings" are intensive magnitudes. Presentations and sensations were thought to come in different degrees of strength, with their strength explaining their causal powers. Hence, exploring the "quantitative side of the mental" (Fechner 1858, 2) and developing ways to measure strength, was an important research task in psychology in the second half of the nineteenth century.³

Enter the German philosopher and psychologist Hermann Lotze (1817–1881).⁴ Among nineteenth-century German psychologists and

1. All translations of previously untranslated texts are my own. For translated texts, I have provided the pagination of the German text in square brackets, the unbracketed page numbers come from the translations listed in the bibliography.
2. For arguments that a theory of desire needs to incorporate a notion of strength, see McInerney (2004).
3. See Brentano (1874/1995, 65–70 [I, 94–102]) for a critical commentary on the measure-theoretic response to Kant.
4. For a brief intellectual biography of Lotze, see the account from his student Carl Stumpf (1918). For longer intellectual biographies, see Pester (1997),

philosophers, Lotze was the odd man out.⁵ According to Lotze, sensations and presentations are *degreeless*; only feelings and volitions have intensity. Hence, there is no intrinsic magnitude or strength that determines the power of a sensation or presentation. Brett highlighted the philosophical importance of this conclusion:

For Lotze the world of inner experience is wholly distinct from the outer world of physical forces and events. If we now pass on to consider this inner experience, the language of the physical sciences can no longer be employed. Motions can be described as having degrees of strength or as being opposed one to another; but one presentation as such is not “stronger” than another, nor can such events as perceptions be described as “opposed” one to another. (Brett 1921, 143)

If presentations are degreeless, neither they nor the stream of consciousness can be theorized in the same way as physical forces and physical processes.

Lotze suggested that the power of a presentation depends on the intensity of the feelings it gives rise to, the intensity of the volition it supports, or both. These feelings and this volition constitute the *interest* of the presentation. The feelings we are concerned with are not emotions such as fear or anger, but feelings of pleasure or pain. Lotze, drawing on physiology, developed Kant’s suggestion that pleasure is the feeling of furthering life and pain that of hindering life.⁶ The feelings of pleasure and pain that, in part, constitute interest ‘measure’ the value of the object of presentation for an organism (more on this in section 12). The power of a presentation (sensation) depends on the

Beiser (2013, part II), and Woodward (2015). For Lotze’s role in British philosophy, see Passmore (1967, 48 ff). For Lotze’s place in psychology, see Stanley Hall (1912, ch. 2), Becher (1917), and Brett (1921, 139–51).

5. As pointed out by Brentano (PS 53, ch. 6 §4).

6. See Wundt (1874, 539), who refers to Kant (1798, 231).

felt degree of the goodness or badness of its object for the organism. Hence, evaluative notions are fundamental to psychology.

Although philosophers did not simply adopt Lotze’s views about strength, his idea that interest and value are foundational to psychology was a core topic in Austrian and Anglo-American philosophy.⁷ For example, Lotze is Franz Brentano’s (1838–1917) main German authority for the view that every mental act has a ‘feeling aspect’.⁸ In Britain, Lotze influenced both Francis Bradley (1846–1924) and James Ward (1843–1925), the latter of whom studied with Lotze in Göttingen.⁹ Ward (1906, 133) insisted (against Kant) that “there is no activity and no spontaneity apart altogether from feeling and interest.” Ward’s student George Frederick Stout (1860–1944) put interest at the center of his work on mind and metaphysics. Stout’s posthumously published *God and Nature* contains a chapter with the suggestive title “Unity of Interest as implying the Unity of the Universe.”¹⁰ In America, William James (1842–1911) made use of the notion of interest in his theory of attention.¹¹

Lotze’s arguments for the conclusion that interest is the central explanatory notion of psychology have not been assessed in detail.¹² In this paper, I shall fill this lacuna.

7. For an overview of nineteenth-century discussions of interest, see Boggs (1904).
8. See Brentano (1874, 148–49 [I, 209–11]).
9. See Bradley (1883) on the fundamentality of interest.
10. Stout (1930, vi) named Lotze as one of his influences.
11. See James (1879, 8) on the “mystery of interest.” For a discussion of how Lotze’s view of interest influenced James’s psychology, see Kraushaar (1936, sec. V). On the connection between interest and attention, see Textor (2023). See Mulligan (2018) for conceptions of interest in phenomenology.
12. Bradley (1895, 20) wrote about Lotze’s treatment of ‘mental’ strength that ‘it is a discussion which no German writer at least might have been expected to ignore’ and then continued to set it aside. Brentano (1957/1988, 71; 78–79), (PS 53, ch. 6, § 4–5) and Reimer (1911, 304–9) are German writers who did not ignore Lotze’s arguments. I shall briefly respond to Reimer in due course; Brentano mainly addresses a methodological argument that is of no importance for this essay.

The paper is structured as follows: sections 2 and 3 introduce those parts of Herbart's psychology and Fechner's psychophysics that provide the background for Lotze's arguments. Sections 4–8 reconstruct Lotze's arguments for the conclusion that neither sensations nor presentations have intrinsic strength. More positively, sections 9 and 10 explain Lotze's argument that the power of a presentation is determined by its interest. Sections 11 to 14 examine Lotze's account of interest.

2. Herbart on 'the Narrowness of Human Minds' and Degrees of Presentation

Lotze's view of interest emerges from his critical engagement with the psychology of Johann Friedrich Herbart (1776–1841). Herbart took an important clue from Locke (1689, 154), who pointed out that human minds are "narrow": human beings can't have a "great variety of ideas" all at once. Analytic or descriptive psychology, argues Herbart, ought to focus on this "narrowness of human mind":¹³

In the analytical part of psychology, the first and most general phenomenon to which one must pay attention is that among all those presentations that a human being bears in themselves and of which he can be reminded, only an extremely small part is conscious at any moment of time. If this human being wants to extend his horizons, wants to apprehend and view more than usual, he loses the number or clarity of the thoughts he had in mind. While Locke noticed the narrowness of the human mind [*Enge des menschlichen Geistes*], it does not look like modern philosophers have given it much attention. (1813, 299)¹⁴

Synthetic or explanatory psychology must explain the narrowness of the human mind.

13. See also Stout (1888, 329).

14. References are to the pagination of the Hartenstein edition.

Herbart's synthetic psychology conceives of presentations as the mental acts of a simple soul. Considered in isolation, we fully specify a subject's presentation by saying what its object is. A presentation is a 'picture' of its object: "each presentation is first and for itself only and completely determined by its object, by what is presented, as this and no other presentation" (1824, 322).¹⁵ But presentations are also relational powers. Presentations of incompatible properties — say of red and green — compete for existence in one and the same subject: "in one consciousness," opposed presentations "push each other out," while compatible presentations 'strengthen' each other (Herbart 1824, 323). If a presentation *P* inhibits an opposing one, the object of the inhibited presentation is "obscured" [*verdunkelt*] and *P* is turned into a power to respond to the presence of other presentations within the same consciousness (*ibid.*, 324). Because it seems implausible for something that is not a power to become one, it is better to say that presentations are relational powers whose power is not manifest when they occur in isolation.¹⁶

Herbart (1824, 324) argued that strength is a degree of the activity of presenting. For example, a blue presentation inhibits a red presentation more than a violet one. If a presentation of blue inhibits a presentation of red, the red is obscured in consciousness — but it is still in consciousness to a degree. Herbart concluded that the activity of presenting (*das Vorstellen*) has degrees. Imagine a scenario where someone cannot focus on the sound of a note or a color because other things are capturing their attention. This is a situation wherein the note or the color are, metaphorically speaking, obscured. The activity of presenting them is weakened. They are, as one might put it in an initial attempt to characterize the phenomena, only faintly presented: the person is still aware of the note, but their awareness lacks detail, and so on. The question of whether the notion of obscuring the object of a presentation can be spelled out in such a way that it supports the

15. References are to the pagination of the Hartenstein edition.

16. See Landerer and Huemer (2018, 63) on this feature of presentations as the key to mathematization of the mind. See also Beiser (2022, 219–20).

view that the act of presenting (perceiving) has degrees is a bone of contention between Lotze and the psychologists who develop a measure for these alleged degrees.

Now, if opposed presentations are in one and the same consciousness, which presentation inhibits which other(s)? A physical body has a certain mass independent of other bodies. Because it has the mass it has, the body has the disposition to resist acceleration when other bodies act upon it. Similarly, a presentation is supposed to have some degree of strength prior to its interaction with other presentations, although its strength is only detectable when such interaction occurs:¹⁷

It is obvious that for a certain presenting to be weaker than another, one does not need to assume that it suffered a partial obscuration [*Verdunklung*]. Even without any inhibition, it may have originally been stronger or weaker. This is well-known in our experience; we ascribed a degree to all of our conceptions [*Auffassungen*]. (Herbart 1824, 324)

The strongest presentation within a consciousness at a particular time simultaneously inhibits all opposing presentations while strengthening and fusing with all compatible ones to create a new presentation. Hence, consciousness is occupied by only one presentation at a time. This is Herbart's explanation for the narrowness of the human mind in a nutshell.

3. Psychophysics and the Strength of Sensation

Lotze (1879, 224 [523]) argued that Herbartian strength is a *virtus dormitiva*.¹⁸ We have no means to determine the strength of a presentation before it "enters the battle of presentations," so "we only attribute [strength] to [presentations] by reasoning backwards after we have

17. See also Stout (1888, 326). I take it that this is also Beiser's (2022, 239–40) reading when he writes that Herbart treats presentations as if they were "self-sufficient sources of energy."

18. See Reimer (1911, 301).

seen the issue of the struggle" (ibid.). So, Herbart has not explained the narrowness of the human mind. To make Herbart's strength-based theory explanatory, one must determine the strength of a mental representation independently of its effects on other mental representations. Ernst Heinrich Weber (1795–1878) and Gustav Theodor Fechner (1801–1887) worked on this issue.¹⁹ They proposed measures of strength for sensations (*Empfindungen*), in particular.

What are sensations? Fechner (1860, 15) says that he uses the term "sensation" in its usual sense. Now, the word *Empfindung* is polysemous in nineteenth-century German. Among other things, it means "a feeling" (as in *unangenehme Empfindung*) as well as "being conscious of something as present."²⁰ This latter meaning corresponds closely to the notion that Fechner and others employ. A sensation, Fechner (ibid.) explains, is the "sensory grasping" (*sinnliche Auffassung*) of something. The sensation of a color is awareness of that color as presently existing. Sensations have objects, and they are supposed to have a degree of strength in addition to a distinctive cause or stimulus. A stimulus is a change in a medium that causes a change in a nerve that then results in a sensation. A stimulus can change in ways that can be measured, such as the volume of sound measured in decibels or the brightness of light measured in lumen, and so on.

Weber and Fechner sought laws to connect the strength of a stimulus that causes a sensation with the strength of the sensation caused. Fechner (1858, 2) thought it undeniable that the mental has a "quantitative side"; his main interest lay in finding a way to measure it.²¹ Still, he said very little to explain and support the claim that sensations have strength in the first place. He wrote that "when an object appears brighter than another object, we call the sensation it gives us intensively greater; when an object appears larger than the other, it is

19. Lotze studied medicine in Leipzig and attended Weber's lectures on physiology and Fechner's on physics (see Becher 1917, 325). Lotze was a friend of Fechner and knew his work well (see Heidelberger 1993, 58).

20. See Adelung (1808, 1799).

21. See Heidelberger (1993, chap. 5).

extensively greater. This is merely a matter of definition and, generally understood, does not measure sensation" (Fechner 1860, 15). Fechner then goes on to develop a measure of strength. But did he do enough to convince his readers that we should take seriously talk of degrees of strength of sensations? The next section assesses Lotze's argument for a negative response to this question.

4. 'All quantitative differences belong to the content': Lotze's Intentionalism

Herbart highlighted the pre-theoretic phenomenon that mental representations carry a degree of power (*Macht*) to inhibit or strengthen other mental representations. Lotze agrees with Herbart that presentations have such a power or force (*Gewalt*).²² Presentations try to rule other presentations by dominating them. But Lotze argued that neither sensations nor presentations have their power in virtue of an intrinsic strength (*Stärke*) that comes in degrees.²³ Only feelings and volitions have an intrinsic degree of strength; they donate power to other mental representations. In this and the following section, I work through Lotze's arguments for the conclusion that sensations and presentations are degreeless.

Let us start with sensation. Lotze characterized the ordinary notion of sensation in more detail. Examples of simple sensations (*einfache Empfindungen*) are "the conscious sensing [*Empfinden*] of a sensory quality, a tone, a color" (1852, 180). Sensing is an activity, and a simple sensation is supposed to be the product of this activity, namely the state of being aware of a quality: "the state of consciousness so well known to us all, the *sensation* itself, the 'seeing' of a light of definite color or the 'hearing' of a sound" (Lotze 1881, 8–9 [5], italics in original).

22. See, for instance, Lotze (1846/1886, 111; 1852 §400, on disturbing force; 1853/1891, 91, 96–97; 1879, 464 [524]).

23. Brentano (1957/1988, 71) was right that Lotze denies presentations strength, but failed to see that the same is true of sensations.

Do such sensations have strength? Lotze investigated this question in detail in several writings and arrived early on at the negative answer:²⁴

The sensation, where it is not mixed with feelings, represents great and small with the same intensity and all quantitative differences fall always into the perceived content. The sensation of a more bright, saturated red is not a stronger sensation, but sensation of the stronger (Lotze 1846/1886, 106)

We can distinguish, on the one hand, between the sensory activity — hearing, seeing, etc. — and, on the other, the content sensed, the quality. Lotze argued that only the content has a quantitative dimension: there are no stronger sensings, only stronger contents. Where Fechner et al. say that we have different sensations of the same object with different degrees of strength, Lotze says that we have different sensations of different objects of different strengths. These objects are the intentional objects of the sensation, its contents.

What does it mean that a content, say a tone or color, is stronger than another? A color can be more or less saturated than another. We can place such contents on a scale that goes from less to more saturated. Similar scales can be found for other qualities. A color is stronger than another if, and only if, there is such scale on which it ranks higher.

Philosophers who hold that differences in what it is like to have an experience are determined by differences in what is represented in the experience are now called "intentionalists."²⁵ Lotze's view about the alleged quantitative side of sensation is similar. He is a reductive intentionalist about the strength of sensations. According to Lotze, talk of a sensation's strength or intensity can be defined away by putting it in terms of the strength of its object:

24. See, for instance, (Lotze 1846/1886, 104–6), (Lotze 1852, 476–83) and (Lotze 1853/1891, 75–76).

25. See Byrne (2001, 202).

The sensation of a stronger tone means the same as what one may call the stronger sensation of the same tone. (Lotze 1853/1891, 75–76)

If sensations have no strength, why are we initially inclined to speak of degrees of sensation? Do we confuse the magnitude of the content with the magnitude of its presentation? No, a further factor needs to be taken into account:

One has to observe that feelings of being shaken [*Gefühle der Erschütterung*] are often connected to the sensation by means of the sense organ. *These feelings have without a doubt different degrees of intensity.* Because of this, it seems as if heavy sounds, piercing colors would cause an intense sensation because it is accompanied by a distinct feeling of the strickenness of the sense organ (Lotze 1846/1886, 106; my emphasis)

Sensations of stronger contents cause feelings and these feelings have degrees of intensity. Feelings of a certain intensity are reliably connected with sensations of the same content. Hence, it requires theorizing and observation to separate the feeling that has an intensity from the connected sensation that is degreeless.

This outline of an error-theory raises the question: why do feelings “without a doubt have different degrees of intensity”? Mere introspective evidence will not suffice to convince Lotze’s opponents that feelings have intensities. Why do feelings and only feelings have intensities? In sections 11 and 12, I shall expound Lotze’s answer to this question.

5. Lotze’s Argument for Intentionalism

What is Lotze’s reason for denying that sensations have intensities and for endorsing intentionalism?

Sensations are supposed to be indivisible acts (Lotze, 1881, 16 [9]). The product of sensing red is not composed of other states of sensing.

The question is whether there is reason to make a conceptual distinction between the qualitative content of a sensation, on the one hand, and a variable dimension of the intensity with which the content is sensed, on the other (*ibid.*). One needs to make such a distinction if there are cases where the qualitative content of several sensations is the same while they differ in intensity. Lotze (1881, 16 [9]) denied that there are such cases. When there are differences in strength in the stimuli that give rise to sensations s_1 and s_2 , s_1 and s_2 are awareness of different qualities; they are not awareness of the same quality to a different degree. He gave a number of examples to make this claim plausible. Here are two:²⁶

If you taste two drinks, *A* and *B*, that differ in their degree of acidity, the difference in their taste is not a mere difference in degree. Acidity is measured by pH. A drink with a pH value around 2 tastes pleasant, if the pH value goes below 2, the drink tastes tart. Taste sensations do not come in degrees, they have different qualities — such as mild or tart — as their objects that can be ranked on a scale.

Imagine that you look at sheet of white paper while the ambient light is gradually dimmed. The simple color sensation that was once of pure white is followed by a sensation of grey, then one of a darker grey, and finally one of black. If asked to describe the change in your experience, you might get a color scale and explain that you first saw this color [pointing to pure white], then this one [pointing to a darker tone], and so on. There is a series of visual experiences of different shades, but there is no series of visual experiences that decrease in strength.

26. The first is from (Lotze 1879, 454 [512–13]); the second is suggested in Lotze (1881, 17 [10]).

The second example undermines an important aspect of the view that sensing or perceiving have degrees of strength. On this view, if the light dims more and more, the successive visual sensations should become successively weaker until they cease: a sensation with zero strength is no longer a sensation. However, the opposite is true. If the light dims more and more, the final experience is of pitch black. The final experience is still an awareness of a quality, namely the opposite color to white — black — and not the limiting case of a visual experience.

So far, there is no good reason to distinguish between what a sensation is directed at, its qualitative content, and its intensity. But, in his lectures published as *Outlines of Psychology*, Lotze made an exception for tone sensations. You hear a tone of definite pitch and timbre. When the stimulus becomes stronger or weaker, the volume of the tone increases or decreases “without altering its nature” (Lotze 1881/1886, 17 [10]). I read this as saying that two distinct sensations can be sensations of the same unaltered tone, yet in one of them the same tone appears louder. Do, then, sensations of tones have intensity? Lotze’s student Carl Stumpf (1883, 349) answered in the affirmative: when we hear a change in the volume of a tone, we are supposed to perceive a change in its intensity as such, that is, without a change in content, that is, without a change in the quality the sensation is directed at.

Lotze did not discuss the tone example any further. But there is reason to resist the idea that a change in volume is a change in the intensity of sensation. Consider hearing a musical tone. The tone you hear has pitch, duration, timbre, and intensity (loudness). You cannot hear a tone without hearing something that has all these features: there is no tone without a particular intensity. In musical theory, tones are specified by all four of these properties. But in *Grundzüge der Psychologie* (1881/1886, 16–17 [9–10]) the tone heard is identified only in terms of pitch and timbre. This is insufficient to specify what we hear. The object thus specified is a type of tone but not a tone we can hear. The type can be instantiated by tones that differ in strength. However, if we fully specify the tone heard, different tones will correspond to stimuli of different strength.

If one wishes to invest sensations with intensity, one needs, therefore, to fully specify the object of sensation and still find a noticeable dimension of variable intensity. Cases of perceptual constancy look promising, initially.²⁷ We saw that Fechner motivated talk of the strength of sensations with the example of brightness (*Helligkeit*). If object *a* appears brighter than object *b*, the sensation of *a* is supposed to be stronger than the sensation of *b*. For example, think of a white sheet of paper seen under various illuminations of different strengths. While the color looks brighter in better light than it does in poorer light, it still looks to be the same color overall.²⁸ This is a case of color constancy: the color appears unchanged precisely because it looks different under different conditions. There is a clear sense in which I am still aware of the same quality, namely white.

Is this a case where sensations of the same object differ in intensity? No; in cases of perceptual constancy, we are aware of one and the same quality as appearing differently by virtue of a change either in relation to us or the conditions under which it is perceived. These examples make a case for the view that our awareness of our movement or the ambient light, or both, partially determines how we experience things. It is thus up to Lotze to say that there can be no difference in strength between different sensations of the same object if the relevant conditions of perception are fixed. But there is still no reason to ascribe strength to sensations.

6. Presentations Do Not Have Strength

Lotze distinguished between sensation and presentation. Presentations are memory images that remain when a sensation has ceased to be (see Lotze 1853/1891, 74; 1852 477). One can present a property because one has perceived it and the presentation preserves the content of the perception. Lotze speculated about the exact relation between

27. For a helpful discussion of perceptual constancies, see Smith (2002, 170–77).

28. See Smith (2002, 175).

sensation and perception, but this speculation is not directly relevant to my purposes here.

Lotze's strategy to argue for intentionalism about the strength of presentations is similar to that which argues for intentionalism about the strength of sensations: if the activity of presenting has degrees of strength, it must be possible to present the same object in different degrees (Lotze 1853/1891, 75). But there are no cases of the same object presented in different degrees:

[W]e can present the same tone as stronger or weaker, and the same color as more or less illuminated. But as soon as this objective intensity has been fixed as invariable, it is not possible for us to think of the now completely constant content in terms of more or less. If the same red is determined fully in terms of hue and saturation, if the same tone is of invariable pitch, strength, and peculiarity in its echo, we may only either present it or not. (Lotze 1853/1891, 77)

Imagine seeing two colored tiles in a kitchen, one on the right and one on the left. The colored tiles are qualitative duplicates: they have the exact same shape and the exact same color, a shade of bright yellow. Can we recall or revive the precise color of the tile on the left more strongly than the color of the one on the right? What we can do is present the yellow on the left as being brighter (better illuminated). But this is just presenting a different content — not the same content with a different intensity. As Lotze says, “we surreptitiously shift our focus to a louder or quieter tone, or to a brighter or a more muted color, while we intended to focus on the same tone, the same color, with a changing energy of intuiting” (ibid.). We perceive a different quality, but our perceiving has not changed in degree.²⁹

One cannot even apply a derivative notion of strength to presentations, because the strength of a presentation is not fully determined

29. See also Lotze (1879, 461 [521]). Ward (1876, 464) adopted this argument for sensations.

by the strength of its object. For example, the presentation of an intense pain does not carry a strength determined by the intensity of the pain presented; likewise, the presentation of a bright color is not itself bright, and so on (see Lotze 1879, 461 [520]).

7. Degrees of Clarity and Lack of Knowledge

Can Herbart's claim that the object of presentation becomes more obscure (*verdunkelt*) shed light on degrees of strength of presentations? Lotze (1853/1891, 86–88) investigated this question by adopting Herbart's talk of the degree of obscurity (*Dunkelheit*) and clarity (*Klarheit*) of presentations to determine whether it supports the degree-theoretic approach. Lotze (1853/1891, 85) did not deny that there are degrees of clarity and obscurity, but he proposed an explanation that is compatible with the degreeless nature of experience. We can use one of his examples to introduce his theory of degrees of clarity.

Imagine we want to remember the sound of a particular voice, but we never really succeed at doing so. We cannot bring about a memory image that is sufficiently rich or precise to recognize the sound or name it. In this case, Lotze (1853/1891, 86) argues, one wants to say that one's presentation of the sound of the voice has “the character of ineradicable obscurity” (*unvertilgbare Dunkelheit*). Over time, the clarity of our memory might increase to a certain extent — but not completely. Does this consideration motivate the introduction of degrees of presentation? According to Lotze (1853/1891, 87), the answer is “no.”

Imagine that you try to remember the distinctive tone of a human voice and you find you cannot. Is the tone indistinctly or weakly presented in this case? No; the memory image of the tone is degreeless, but it is associated with many similar memory images from which we cannot distinguish it. Instead of a presentation or memory representing something to a degree, there are two things, x and y , that are each presented in a degreeless manner — and we are not sure whether $x \neq y$. A presentation P of object x is unclear if there are also objects y, \dots, z such that having P does not allow one to come to know whether $x \neq y$

and $x \neq z$.³⁰ The degree of obscurity regarding a presentation involves a lack of discrimination; when additional knowledge allows one to discriminate P 's object (x) from more objects than before, the degree of obscurity decreases. There is thus ignorance of distinction (and sameness) but no change in the degree of presentation in the sense understood by Herbart.

8. The Power of the Weak

Sections 4–7 worked through Lotze's arguments for intentionalism about strength. With this in mind, we can now return to the question of whether the power of a sensation to dominate other presentations can consist in its strength. In discussing this question, Lotze assumed that we understand the ostensibly stronger sensation as the sensation of a quality that outranks others on a scale. For example, we see some colors and one of them is the most saturated; we may then go on to ask whether the stronger sensation is more powerful than the weaker. *Prima facie*, if I perceive several colors at the same time, the perception of the most saturated one will outcompete the others and come to occupy my perceptual consciousness. If I remember the colors that I perceived, the most saturated color is the one that I remember most easily.

This sounds plausible, but it cannot be generalized. For "the victory does not always fall to that side which in itself is stronger; favorable circumstances may give it to the weaker" (Lotze 1879, 464 [523]; see also 1853/1891, 96–97; 1881 §6.) Let us consider cases in which the presentation of a weaker object wins over that of a stronger one. Imagine that in a museum, a wall is covered in bright red paint with a tiny dark smudge of blue in one corner. Our perception of the red expanse is certainly stronger than that of the tiny smudge. But let us put ourselves now in the shoes of an art critic, or the curator of the museum or someone who suffers from a fear of stains (stainphobia). In these cases, the perception of the tiny smudge can outcompete the perception of the bright red expanse. The tiny smudge will occupy our

30. See Williamson (2013, 6–7), who uses a lack of knowledge of distinctness to define discrimination.

consciousness and our train of thought will revolve around it rather than the bright red expanse. If we suffer from stainphobia, we will not be able to focus on the red wall at all, even though the color of the wall is stronger and covers more of our visual field. These sorts of examples can be multiplied, such as the perception of the loudest tone in a performance losing out to the perception of a less intense tone. In now much discussed cases of attention and change blindness, people occupied by a task fail to notice a gorilla in their midst, even though the gorilla occupies the majority of their visual field.³¹

Presentations can also be ranked in terms of the intensity of the quality they present. Here, it is even easier to see how a presentation of an intense quality may lose out to a presentation of a weaker quality. Imagine thinking about the red expanse with the smudge. The presentation of the colored expanse has a more intense object than the presentation of the smudge — yet, under the right circumstances, the presentation of the smudge can win.

9. 'The more interesting idea conquers'

Lotze used the metaphor of a fight for dominance to give a helpful summary of his arguments against intrinsic strength and to suggest an alternative explanation of the narrowness of mind:

The success of presentations in their fight against each other does not depend on magnitudes that could be immediately applied to themselves as presentations. As presentation, they are, rather, degreeless invariable elements. A ruler exercises power over their dominion that does not derive from the immediate intensity of their being and doing, but mostly from favorable circumstances. Presentations likewise do not have a degree of distinctive strength in themselves by virtue of which they could be compared through a measure before and independently of any interaction. Instead, favorable circumstances, the

31. See Simons and Chabris (1999).

number of associations, and the feeling of interest that is always present combine to create a power in regards of whose exercise they may be called weaker or stronger. (Lotze 1853/1891, 96–97; see also Lotze 1846/1886, 108)

We know that presentations have no strength, but they have the power to dominate other mental representations. Where does this power come from? The power of a King is bestowed on him by an external factor: the will of an authority (e.g., the people, God). Similarly, the power of a presentation is supposed to be bestowed on it by an external fact.

A similar argument can be made for sensations. One can ascribe to a sensation a strength, because its object has a place on a scale. But this strength does not determine the power of the sensation to dominate other mental representations. We need to look for an external fact that bestows this power.

In the last quotation, Lotze identified the source of the power of presentations (and sensations) as associations and “the feeling of interest.”³² Which associations are active depends on the interest we take in them. Hence, the feeling of interest is the fundamental factor here.

This is in line with our pre-theoretic understanding of interest: my perception of the smudge on the canvas wins out over my perception of the bright red canvas if it is of greater interest to me. We know what it means to say that “his essay on French wine was more interesting than his book on cheese.” Interest seems to come in degrees. We may be moderately interested in something or we may have an intense interest in it.

32. See Lotze (1846, 108–9; 1851, 95, 108–9; 1852 §420, §423, and §515; 1879 §264; 1881, 20).

10. Interest Before Lotze: Herbart and Fries

Lotze was not the first to make philosophical use of the notion of interest. He would have found the concept of interest in Herbart and Herbart’s contemporary, Jakob Friedrich Fries (1773–1843).³³

According to Herbart’s *Allgemeine Pädagogik*, interest, desire (*Begehrung*), will, and judgments of taste are all contrasted with states of indifference. Interest and desire are importantly different in temporal orientation. Desire is future oriented: one can only desire what one does not yet have (1806, 52). In contrast, interest is directed toward the present: it is ‘attached’ to what is presently perceived (Herbart 1806, 52).³⁴ We may be actively interested in seeing the behavior of an insect on a twig before us, but we cannot desire to see this behavior when we do see it. We can only desire to see it when we are not yet seeing it. Because of its present-directedness, Herbart brought interest and perception close together and observed that “interest is only elevated over mere perception in that the perceived object is treated preferentially by the spirit, making itself felt among the other presentations by means of a certain causality” (1806, 52). In a subsequent step, Herbart (1806, 53 and 67) will say that the effects of interest depend on the power of the presentation that one takes an interest in. This move takes us back to the disputed strength of presentations.

Herbart provided pointers as to the nature of interest by distinguishing it from desire. Lotze’s own view of interest is, however, closer to Fries’s.³⁵ Fries (1820, 36) argued that the mind has three basic powers: cognition (*Erkenntnis*), heart (*Gemüth*), and willpower (*Tatkraft*). The heart “provides us with the *interest* in the presentations of the *value* of things which we possess in the *feelings of pleasure and unpleasure*” (1820, 36; original emphasis). The heart is the power to have feelings of pleasure and unpleasure that are sui generis presentations of the value of

33. On Fries’s psychology, see Leary (1982).

34. References are to the pagination of the Hartenstein edition.

35. Lotze engaged with Fries early on. He was critical of Fries’s philosophy of nature, but praised Fries’s psychology and epistemology. See Pester (1997, 41–42).

things. We feel the goodness or badness of something in virtue of taking pleasure or displeasure in our presentations of it. If we have such feelings, we take an interest in the thing in question. These feelings may develop into drives and desire. This is, in essence, the conception of interest Lotze will operate with. Fries (*ibid.*, 38–40) criticized Descartes, Leibniz, Spinoza, Wolff, and Platner for taking cognition to be the only basic power of the mind. We also need the heart, because one cannot derive felt evaluations from cognitions: interest cannot be defined in terms of cognition. But one can only take an interest in something that one presents or cognizes (see Fries 1820, 39–40).

Lotze disentangled interest from Herbart's mechanics of mind. He kept the pre-theoretic concept of interest as a guide and followed Fries in connecting pleasure and displeasure to value as well as taking interest to depend on presentation, sensation, or both. From Lotze's arguments and Herbart's remarks about interest, we can glean the following properties that the interest of a presentation is supposed to have. Interest is supposed to be

1. independent and prior to the outcome of the competition between simultaneous presentations;
2. attached to (depends on) the presenting activity;
3. intrinsically gradable; and
4. present-directed.

The next section discusses whether and why feeling possesses properties 1 to 4.

11. Interest and Feeling

Imagine that you open the pantry and you are overwhelmed by the smell of rotten eggs. The smell is foul and you feel revolted. With this feeling, we evaluate the smell as bad. The feeling is tied to the olfactory sensation, your awareness of the odor, and is independent of your beliefs about the odor. The felt evaluation illustrates points 2 and 4

above: the power of a presentation is bestowed upon it as something that attaches to the presenting activity. Felt evaluations attach to this activity and are then directed to the presently perceived content.

A felt evaluation has degrees. Rotten eggs, for example, smell worse than a puddle of stale beer. Our olfactory perception of their odor is more powerful than other olfactory perceptions because it has a regular connection to a feeling that is more intense than the feelings connected to other perceptions. About the intensity of feeling, Lotze (1853/1891) wrote:

Our train of thought is constantly directed by the *interest* we take in a presentation, that is, by the magnitude of pleasure or displeasure presentations generate. The feeling is a mental expression whose intensity so clearly possesses an infinite gradation that we can apply it to the measurement without hesitation, even though we cannot apply it to the energy of presentation. (95, my italics.)

The varying intensity of feeling is not, like Herbart's strength, an explanatory posit of a theory. That a feeling is stronger than another is, in many cases, manifest to the feeling subject. I have a good sense of how strong my bodily pain is independent of any conflict between it and other presentations. Hence, Lotze's claim that the power of a presentation to inhibit or strengthen other presentations depends on the magnitude of pleasure or displeasure they cause is explanatorily fruitful. This gives us point 1.

We can compare pleasures or pains with respect to their intensity. I can say with great confidence that the pain of my nephritic colic was much worse than the pain of my headache yesterday. The same applies to pleasures; all of us can give a rough-and-ready ranking of degrees of pleasure. We often experience increases or decreases in pain and pleasure/pain over a period of time.

While we can compare intensities of pleasure and pain and rank them accordingly, such rankings will have gaps. I cannot judge whether my headache yesterday and the pain of a cut today are equal or if

one of them was more intense. A ranking with gaps may be mathematically unwieldy, but it is still a ranking.

A feeling is not composed of feelings as its metaphysical parts. An intense pain is not a sum of many less intense pains. In Meinong's (1896/1913, §3) terminology, pain and pleasure are indivisible quantities. Therefore, the equality or inequality of pleasure and pain can neither consist in nor be measured in terms of the sameness or difference of pain and pleasure parts. Yet, this does not take anything away from the view that pain and pleasure have intensities.³⁶

Can the degrees of strength of feelings be explained away as differences in their objects? No, intentionalism about the strength of feelings has no initial plausibility. I may, at different times, feel more or less disgusted or more or less excited by the same object even when it is given to me in the same way. A painting may look exactly the same to me as it did yesterday, but my generally good mood today makes me take a more intense pleasure in it. Details that annoyed me yesterday no longer matter, but they are still given in my perception of the painting. The intensity of the feeling is not due to its relation to something else. Just as an iron cannot be hot without having a degree of heat, one cannot have a feeling without the feeling having a degree of intensity. Hence, feelings satisfy point 3 from the last section.

Are there any other mental acts that satisfy properties 1 to 4 and compete with feelings? The likely candidates are desires and beliefs. But we have already seen in the previous section that desires do not meet point 4 and are therefore disqualified.

What about belief? Epistemologists distinguish between full and partial belief, where the latter admits of degrees. For example, we believe with greater confidence that the sun will shine tomorrow than that the tube will be on time.³⁷ So, let us assume for the sake of the argument that there are indeed degrees of belief. Now imagine that we see three objects, *a*, *b*, and *c*, in front of us. Of these three, *c* intrigues

36. For a brief discussion of indivisible quantities and measurement, see Russell (1903, 160–61).

37. For an overview, see Eriksson and Hájek (2007).

us and occupies our consciousness. But we believe to the same degree that *a*, *b*, and *c* exist. Hence, degrees of belief fail to explain the strength of a sensation.³⁸

In sum, feelings fit the profile of a power-determining factor. If a presentation gives rise to a strong feeling, it will inhibit other presentations that give rise to weaker feelings. If we perceive several things, those that give rise to the strongest feelings will hold our attention. The brightest thing may not give us the most pleasure or pain, so its presentation may not be the most powerful. This is the beginning of an argument, but it needs further development, because Lotze needed to broaden the notion of interest to include intellectual interest beyond feelings. The next section addresses this issue.

12. Feeling as Measures of Well(III)-being

There is a theoretical reason for the view that feelings are gradable. An organism needs to be aware of whether things are going well or badly for it. This awareness cannot be propositional knowledge that a norm is satisfied. Many organisms are not capable of such knowledge at all. The awareness of whether things are going well for the organism must be non-propositional and non-conceptual. Feelings fit the bill:

It cannot be proven but is a natural belief and probable hypothesis that feelings are consequences and marks [*Kennzeichen*] of agreement or disagreement between excitations in us and the conditions of permanent well-being. (Lotze 1881, 74 [44])

Sensory feeling is a measure of well- or ill-being. With a perception, we become aware of the object that produces the perception. With feeling, we are thought to perceive the measure of a relation (*x* is good or bad for *y*) between the mental episode that produced the feeling and ourselves (see Lotze 1852, 236). When I take pleasure in hearing a

38. If a strong belief that *p* is just an intense feeling that *p* is the case (see Woudenberg & Peels 2016, 60), talk of degrees of belief would confirm Lotze's view that only feelings have non-derivative degrees.

sound, for example, the degree of pleasure measures how well hearing the sound satisfies me. Part of this idea is that “the strength of feeling is a measure of the relation between the stimulus effect and receptivity” (Lotze 1852, 249). The felt intensity of a pain measures the strength of the destructive effect of the stimulus on the organism and causes a proportional response. Degrees of pain thus estimate degrees of bodily or mental harm.

Counterexamples are, however, easy to come by. When I take great pleasure in indulging an idle fancy, for instance, this could have negative consequences for me in the future. I may waste my time or lose touch with reality, and so on. In response, Lotze (1852, 237–39) distinguished between momentary and long-term goodness and badness to argue that pain and pleasure measure only the former. His argument is straightforward: what does not yet exist cannot be measured by feeling. He (1852, 238) compared feelings to a thermometer that can measure only the current — not the future — temperature. Sensory feelings measure the value or disvalue for us now of the things we feel.³⁹

Lotze’s view that the intensity of a feeling measures the degree of agreement or disagreement of a sensation or presentation of an object (or the object itself) with the well-being of the organism may explain why feelings endow presentations with power. It is plausible that the mental economy of beings like us is designed to maintain or promote well-being and minimize ill-being. If feelings flag presentations as relevant to well- or ill-being, these presentations will attract our attention, and so on. Lotze naturalized the felt evaluations Fries had highlighted before him.

13. Constant and Variable Interest

Lotze’s account of interests posits a further determinant of interest. To see why, let’s extend the example from section 11. I find the smell of

39. Reimer (1911, 305) ascribed to Lotze the view that the intensity of a feeling is itself felt. Hence, we seem to embark on a vicious regress of feelings. Lotze held that feeling has an intensity that we can be conscious of, but why should the intensity itself be felt?

rotten eggs disgusting, but later in life I become a scientist and one of my projects requires me to investigate rotten eggs. At this point, I take an interest in rotten eggs and their smell (although I still find the smell foul). The smell might be a rich source of information for me that allows me to make predictions and give explanations. My perceptions of it vanquish other presentations. This example illustrates Lotze’s claim that there is a variable aspect of interest and that the variable part outweighs the feeling part in determining the power of the presentation (see Lotze 1852, 238).

This brings us to the part of interest that is not a hard-wired feeling and which can vary over time within a single soul. The variable aspect of interest in a presentation at a time depends on its associations with further presentations and their fixed interests and on the total state of the soul at that time.⁴⁰

Lotze distinguished *moods* and *strivings* as the main components of the total state of the soul. Moods are distinguished as persistent colorings initiated by momentary feelings (see 1852, 514). We do not need to engage with Lotze’s remarks about the character of moods here but can use an example to illustrate his idea. Many moods are dependent on the position of the body (*körperliche Stimmungen*) and change correspondingly:

Our thoughts and tendencies differ according to whether we recline or stand. A constrained and cramped bodily position dampens our courage; it is difficult to be reverent in a comfortable and slouching attitude; rage subsides with bodily repose; the hand that smooths the wrinkled brow dispels the vexation it expressed. It would be difficult to determine the limits of this influence, but it doubtlessly extends very far.... (Lotze 1852, 518)

There are also strivings. The “only clear application of the concept of striving is when it is conceived as identical to the conscious willing of

40. See Lotze (1879, 465 [525]; 1856/1912, 219 [246]; 1881, 35 [20]) on the total state of the soul (*Gesammtzustand der Seele*).

a soul" (Lotze 1852, 296). Lotze gives examples of less clear applications of the concept of striving. These include feelings that turned into drives once one acquires knowledge of the means to abate or strengthen these feelings (see Lotze, 1852, 298–99).

For our purposes, a clear case of striving suffices. Imagine wanting to know how many fruits are in a bowl. We strive to attain this knowledge. We are in a neutral mood, neither particularly happy nor particularly sad. The fruits have striking colors such that seeing them is pleasant. The fixed interest of the color perception is high. Nonetheless, the perception of the colors is vanquished by perceptions that support our counting. Our striving determines that our total interest in the striking colors of the fruits is low, while our interest in demarcating them is high.

14. Total Striving and the Intensity of a Volition

The interest of a presentation depends not just on the feelings that it gives rise to or the feelings that the presentations it activates give rise to. Its relation to the total striving of the mind is, in many cases, a further factor that determines its power. Sometimes, it is the only factor:

If we stick, as we need to do here, to healthy states of the life of the soul, it is not possible to ever find a dance of ideas on which no reigning and penetrating interest of the spirit is directed. *Even where the content of one's thoughts does not provoke distinct feelings, the somehow motivated occupation with it assigns it a momentarily prevailing value for the total striving of the spirit.* This cannot, by any means, be left out of the calculation of the circumstances. (Lotze 1846/1886, 108–9, my italics)

One may be indifferent to the truth of the proposition that $1 = 1$ when one affirms it. Unlike when one smells rotten eggs, there is no distinctive set of feelings that one is hard-wired to feel when one thinks this thought. But when one is engaged in a goal-directed activity, such as proving the laws of arithmetic, the thought may acquire a felt value.

Lotze assumed that there is always a total striving in a healthy soul with respect to whether the interest of an experience or episode of thought is partially or completely determined. In an ill soul, there may be no reigning interest. This may be because there is no interest at all, or because there is no total striving. But let us stick with the healthy soul. The assumption that there is only one total striving in a healthy soul at a time requires justification. I may desire both to go to the cinema tonight (there is a good film on that I do not want to miss) and to finish this paper tonight. I cannot satisfy both. Is there one total striving tonight?

For some psychologists, such as Wundt, the answer is yes. According to Wundt (1897, 186 [188]), both feelings and strivings have strengths that can aggregate. For this to work, we need to assume that strivings have strength and that there are relations such as compatibility and opposition between strivings.

However, it is implausible to ascribe a degree of strength to a desire. While it is plausible to assume that perceptions of properties give rise to feelings of a particular kind, this assumption is not warranted with respect to motives. There is no hard-wired feeling response to my desire to go to the cinema. In different circumstances, the desire feels different. Moreover, the assumption that motives have strength is vacuous if there is no independent way to measure it. In his lectures on practical philosophy, Lotze used this objection to cast doubt on the value of assigning strength to motives:

If two motives *a* and *b* have been weighed in the mind, and thereupon an action β is executed that corresponds to *b*, then, of course, *afterwards* the *appearance* always originates in our point of view as though β were naturally brought about by *b* and its ascendancy over *a*, with a strict *necessity*. But for the intensities of the motives *a* and *b*, we possess no measure at all by which we might be able to measure them *prior to* the occurrence of the action. That *b* has been the stronger of the two is a bare *hypothesis*

that we make *ex post* just because we are accustomed to deducing effects in *nature* from such preponderance of a greater force over the less. If, on the contrary, we just assume that there has been an act of free will that decided for β , then everything will appear exactly the same in the procedure. In that case, too, we shall *afterwards* be able to consider *b* the *stronger* motive — only its preponderance, in that case, will simply derive its origin from the *free resolution* that the will decides for it. (Lotze 1884, 40–41 [27], emphasis in original.)

According to Lotze, saying that I went to the cinema because my desire to do so was stronger than my desire to finish the paper is an empty statement. We do not explain the outcome but rather re-state it. In contrast, the explanation that I went to the cinema because I decided to go to the cinema and not finish the paper is genuine. We have first-person knowledge of deciding; one can know that one decides to act upon a desire before one acts: “Yes, I went to the cinema tonight because I decided that afternoon to go.”

In essence, then, variable interest is thought to be determined by decision. A decision is an act of the will. Considering the will more closely adds detail to the explanation Lotze takes as superior to the non-explanation in terms of strength. Lotze (1852, 300) takes the notion of a volition to be primitive; one has to experience a volition to know it. We think of volitions as exercises of a power, namely will-power. Both common sense and law encode the view that there is such a power and that it grows over time.⁴¹ But what grows over time is the strength of the will. So, what should one think of the mysterious notion of strength? In his 1878 lectures on practical philosophy, Lotze answered:

Now, however little we may be able to describe its essential nature in other words, it is nonetheless certain that

41. See Lotze (1852, 632).

we are speaking of the will only in case there exists a certain amount of exertion [*Anstrengung*] toward its actualization (in addition to the aforesaid insight). That is to say, every act of the will must have some degree of effective intensity.

If freedom is to be maintained at the same time, such a degree of strength [*Stärkegrad*] could not be conditioned upon anything external to the will. We should therefore be compelled to demand that a perfect freedom determine not merely the *direction* that the will is to take, but also the *power* [*Kraft*] with which it projects itself in this direction. (Lotze 1884, 49–50 [33]; I have changed the translation, italics in original.)

If our will is free, we freely determine what to do, the direction of the will, and we freely determine the intensity with which to pursue our goals. In the 1880 lectures, he elaborated on why the intensity of a volition cannot be determined by feelings:

If one thinks the intensity [of the will] again to be determined by states of the heart [*Gemüth*], the assumption of freedom loses all its advantages and one returns to determinism. Nothing else would remain than to decisively maintain that the will determines not only the *direction* of its decision but also the *intensity* with which it pursues it in complete freedom. (1882, 24, italics in original.)

Lotze’s own conception of the undetermined intensity of a volition is based on a conception of freedom that many will find problematic.⁴² Lotze (1882, 24–25) conceded that, in fact, we may not have freely determined the intensity of a volition, but maintained that we could have. In fact, we do not simply will with a particular intensity. Rather, the intensity depends on feelings and affects (*ibid.*). This commonsense notion of intensity is sufficient for the purposes of this paper. Consider

42. See Stumpf (1939, 842).

some examples. Athletes frequently explain why they won an event by appealing to the intensity of their desire. For instance, British swimmer Adam Peaty explained what makes an Olympic champion as being “the best person on the day, who is the most adaptable, and really, who f-ing wants it more.”⁴³ Or, consider someone who is trying to kick a longstanding habit; it takes great effort to succeed. Some want it more than others, and the former tend to be successful. Holton (2003, 56–58) draws on empirical work on ego-depletion to argue that there is a faculty of willpower that is exercised in resisting the revision of one’s decisions. The intensity of a volition may depend on how much pleasure you take in imagining or attending to a goal. Hence, this intensity is not, as Lotze wants for free volitions, unconditioned, but it can still give your striving a degree of intensity.

If a volition has an intensity, how is it measured? There is no precise measure as there are no units of willpower. My will to go to the cinema is not composed of parts that each have an intensity. Still, we can rank volitions in relation to each other. In relation to the intensity of the will, Lotze draws his readers’ attention to the notion of effort. The feeling of effort guides the ranking of volitions. For example, I desire to go to the cinema and decide that I shall go tonight. There is also the prospect of a nice dinner. I have a feeling of distraction and obstruction and feel that effort is needed to overcome the temptation to go to dinner. The degree of effort that is felt necessary to overcome the competing desire measures the strength of the volition. The stronger the feeling, the greater the strength of the volition. In another example, imagine lifting a heavy weight. The intensity of the feeling of exertion is a measure of the physical power invested in lifting.⁴⁴ Similarly, the feeling of mental exertion is a measure of the willpower expended.

43. <https://www.insider.com/tokyo-olympics-adam-peaty-f-word-interview-gold-medal-2021-7>.

44. See Husserl (1893/2004, 172).

Conclusion

Lotze gave us reasons to endorse the view that mental states and processes come in two varieties: some have intrinsic degrees of intensity — namely feelings of pleasure or displeasure and volitions — all others are intrinsically degreeless: they have degrees of strength in virtue of their relations to such feelings. These feelings constitute what Lotze called the invariable part of interest; the variable part of interest is also determined by volitions that make up the dominant striving of the mind. Volitions have degrees that, plausibly, are also determined by feeling states. Because feelings and volitions endow all other mental phenomena with interest and interest determines the power of a mental phenomenon, one cannot theorize the important phenomenon of attention — the narrowness of the mind — or other such phenomena independently of interest. “With Lotze,” wrote the American psychologist Granville Stanley Hall (1912, 93), “even association is determined by a struggle of the *emotional values* of concepts with each other” (my emphasis). Psychology turns out to be a science in which value plays an explanatory role.⁴⁵

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