

Perceptive continua and immanent realism.
Perspects of study of the work of Franz Brentano in a recent book of Liliana Albertazzi

Beatrice Centi

The book of Liliana Albertazzi, *Immanent Realism. An Introduction to Brentano* (Springer 2006) is a punctual and complete presentation of the thought of Franz Brentano (accompanied by a rich bibliography) concerning all the fundamental problems of his work and showing those to which Brentano's fortune and importance in the second half of the nineteenth century and in the first half of the twentieth century are due; in part, they are still fundamental in the contemporary philosophical, psychological and physiopsychological research. It is not possible to present all the aspects of the Brentano's complex way which Albertazzi learnedly brings out; therefore I shall highlight the aspect in my opinion more interesting, the aspect for that the theory of the intentionality is a theory of perceiving.

The book is focusing both on the problem of the perceived and of the modalities of the perception, and on theoretical implications of the perception act from the point of view of the concept of reality: by the appropriate expression «immanent realism», the title introduces to the mature attitude of Brentano. With reference to this, the book supports by documentary evidence the more meaningful changes of Brentano's thought in the course of his life. Among the better highlighted problems, shows all his fecundity that of the nature of secondary qualities such as colours: the more important question is that «concepts like a colour or a sound *in general* are not immediately given by the sensory capacity, which only furnishes sensations of a *particular* red of a certain kind» (p. 71). These concepts as the concepts of number and substance depend on intellect, the cognizing faculty that differs from faculties of sensory cognition (p. 72). According to Brentano in *The Psychology of Aristotle*, «we have in us the concept of colour and the concept of a tone in general, and these representations cannot possibly be counted among the sensory images of sight and hearing. For sight does indeed cognize white and black and each particular colour, but colour as such it does not cognize» (p. 72). From this point of view, we are conducted to the relationship between the intellectual faculty and the sensible faculty, one of the fundamental problems as of the brentanian interpretation of the Aristotele's philosophy (p. 73) as of the Brentano's thought. The problems involved in this relationship are focused on the function of the phantasy. In his book on *The Psychology of Aristotle* (1867), Brentano reminds that the phantasia is sitted in the sensitive soul, between sensation and intellect (on the phantasia or imagination, see the note 66, p. 67), therefore its function is conditioning all the knowledge, sensible and intellectual. It is the more meaningful the more Brentano went on reflecting upon this matter, from *The Psychology of Aristotle* until a text especially dense like *Psychology* III, pointing out the part of the «sensory representation» (p. 75) and its importance for the intellect. It is therefore particularly considerable that the *nous poietikos* is identified with the imagination (p. 76). As Albertazzi maintains, «Brentano's analytical re-reading of *De anima* has therefore led him to identify in the problem of the relation between *sensory knowledge* and *noetic knowledge*, and in that of the imagination and the temporal structure of the presentation, the core of a logical reconciliation between *theory of perception* and *theory of knowledge*. And it has also enabled him to verify the hypothesis with which he began. His investigations of the *phantasma* and of the *temporal structure of presentations*, which are intimately bound up with each other, would henceforth constitute one of the essential components of his psychological theory» (p. 77).

Much properly, Albertazzi emphasizes the problem of the intermediate – that I mean as an intermediate degree, to avoid dualistic interpretations –, of the trans-audible and the trans-odorous, «in Theophrastus' terminology [...]. Between the sensation and the senses, the potency and the act, there exists in fact an *intermediate phase* which is a correlate of the sensation itself given by the

medium concerned, and which enables transmission of the form in the sense of the releasing of the *quidditas* (nature) embedded in it. In other words, we perceive the *form* and not directly the activity of the external stimulus, so that the object of the sensation is properly the ‘aspect-s’ given by the means and *not the physical substrate* of, for example, the physical colour, the physical sound, etc. In each occurrence of figure/ground segmentation, then, as a basic law of perceptual organization, we refer to very complex relations between a medium and a perceptual object (or form) that is carried by it » (p. 81). In according to this physiologically oriented interpretation of Aristotle, there is another specific level within the process of assimilation that is responsible « for the presenting of appearances in the perceptual fields » (p. 81), as exemplified by the case of the development of colour perception, from forms of light (like brightness, lustre and changeability) to colours of objects. Brentano’s reading and interpretation of Aristotle’s *De anima* highlights the contemporary problem of the reductionism or otherwise of his analysis of the perceptive process. Aristotle seems to permit three opinions with regard to the nature of the assimilative process: a physiological, a symbolic or representational, an interpretation embryonically phenomenological centred on the existence of «a medium, between the stimulus and perception, which enables its assimilation in terms of continuity, although it is not directly ‘affected’» (p. 82). According to Albertazzi, the last interpretation is like the Brentano’s interpretation, with particular regard to the theory of continua. This interpretation supports the idea of an emergent level on the physiological basis. From this point of view, Aristotle’s theory covers a number of themes which link directly with the nineteenth-century psychophysics, particularly as regards the distinction between stimulus and perception of forms, and also as regards the differences among the diverse formats of representation (sensation, correlate, perception, representation, memory, judgement, etc.). This is the theme that unifies such apparently disparate works as Brentano's early aristotelian writings and *Psychology from an Empirical Standpoint*, but also the texts collected in works as *Philosophical Investigations on Space, Time and the Continuum* and *The Theory of Categories*, to which Albertazzi rightly dedicates a great attention.

In general, intuitive and noetic knowledge meet in the inner sense, in his turn intermediate between body and consciousness.

The various functions of the inner sense (like the distinction and the perception of differences among the objects of several senses, like the perception of the identity of the objects of different senses, like making self-consciousness possible) permit to definite the inner sense as «*active corporeal quality* which acts as the medium for every other sensation» (p. 70). Thanks inner sense, perceived objects become conscious and it is the subject of the animate body: «the proper sensible is therefore an *inner sense* different from all the other senses, which are external. Specifically, it is *a particular sense directed at the inner movements of the sensitive part*. It is also the most important of all the senses, because, as Brentano further specifies: ‘It must be this sense that perceives not only what we sense, but also the remaining sensitive operations, for example, sensual desire, and that gives us self-consciousness to the extent to which it belongs to the sensory part. Without question, therefore, it is pre-eminent among all senses’», (p. 69, always referring to the book on Aristotle’s psychology).

From all these considerations derive in my opinion two questions concerning the relationship between the intermediate degree of perceiving and the inner sense as primary form of consciousness, between inner sense and imagination, which are passing not only through the Brentano’s thought, nevertheless it is surely a peculiar merit of the study of Albertazzi to highlight this theme in Brentano.

According to Albertazzi, the antireductionism of Brentano in his *Psychology* represents a development of Aristotle’s theory of perception, independent on psychophysics; but also it is the result of Brentano’s reflection on herbartian (p. 94) and lotzean themes. It is a meaningful aspect of the work of Liliana Albertazzi to underlining the importance of the Lotze’s book *Medical Psychology or Physiology of the Soul* (1852) for the psychology of Brentano. In fact, Lotze defends the perception against reflection, the concrete particular against pale and vacant general

ideas; according to Lotze, «there are concrete universals of sense which arise from perception» (p. 88): Lotze has attached a great importance to the problem of the qualitative from the article *Seele und Seeleleben* (1846). Elements of his theory are to be found in the Külpe school (Mayer, Orth, Ach), in the Leipzig school (Cornelius, Stern), and in the Graz school (Meinong, Ehrenfels, Witasek, Höfler, Benussi) (p. 89).

All these problems are analysed by Albertazzi from the point of view of the unity of the intentional act and of the complexity implicated in the intentionality.

The analysis of the psychic acts and of the phenomenal appearances that arise on the basis of physiological products has conducted Brentano «to discover and to describe the existence of *further modifications* of stimuli – rather than the physiological modifications already analysed by psychophysiology – due to the specific *structure* of consciousness» (p. 94). But above all, Brentano and his school have analyzed «the *organization of the elementary sensations into temporal and spatial phenomenal patterns* imposed by the structure of the intentional reference of presentations» (pp. 94-5) (what prompted the research by the Graz school into the structure of inner time). This is the most relevant aspect of Albertazzi's presentation of brentanian thought, «which laid the basis for the study of the perceptual laws organization» (p. 95) and which, as Albertazzi insistently points out, «had aristotelian origins» (p. 5), but also – I point out – herbartian and lotzean origins. All these questions have been rather well characterizing the antireductionism of Brentano as well that of a great part of the philosophical culture of the second half of the nineteenth century.

Albertazzi reminds that the sensitive soul has three vital capacities: sensation, imagination (phantasia) and intellect. Focusing on that, Brentano discusses Aristotle's conception of sensation in general and of the subject of sensation itself (pp. 67-8). Finally Brentano «identifies the object of the *proper sensible* – which differs from the object of each of the individual senses – in the *sensation itself*» (p. 69). The object of the proper sensible is not an external object: the proper sensible is an inner, particular sense, directed at the inner movements of the sensitive parts. It is also the most important of all the senses (p. 69) because it makes self-consciousness possible and acts as the medium for every other sensation: «it is responsible for the fact that perceived objects are *conscious*» and «resides not in the soul but *in the animate body*, of which it is the *subject*» (p. 70).

It is also correct to insist on the connection between this aspect of the aristotelian thought and the importance of the perception and of the inner conscience concept in Brentano, but it is necessary to investigate on the influence on these aspects of Brentano's philosophy of Herbart, Lotze, Fechner, Bain, Hamilton, Mill.

Certainly, on commenting Aristotle's psychology, Brentano highlights an intermediate zone between inner sense and intellect, coming from the problem of concept like a colour or a sound in general, which «are not immediately given by the sensory capacity, which only furnishes sensations of a *particular* red of a certain kind» (p. 71). As Brentano observes, «active in our consciousness are two different types of faculty which, though different, cooperate with each other» (p. 71). In according to Brentano, always in *The Psychology of Aristotle*, «we have in us the concept of colour and the concept of a tone in general and these representations cannot possibly be counted among the sensory images of sight and hearing» (p. 72). But we «cognize white and black and each particular colour, but colour as such it does not cognize» (p. 72). Nevertheless we have an idea of the white colour in general and of the colour, more in general. This is a capacity of consciousness, to that contribute inner sense and intellect, according to the Aristotle's language. It is one of the main merits of the study of Albertazzi to showing how such questions, originating from a juvenile work, produce fecund interrogatives at the end of the life of Brentano, when he thinks his own main problems again. It is showed in *Psychology III*, where Brentano returns to the relationship between the sensible faculty and the intellectual faculty and their objects. The sense and the intellect have the same objects «but given *in abstract and simpler manner*» (p. 73).

The objects are given in different ways. From this point of view, the *nous poietikos* is not as much a form of thought as what makes thinking possible. It is another mode of givenness.

This is an aspect very interesting of the theory of intentionality that Albertazzi presents carefully and in an articulated way, not from the already much studied point of view of the structure of relations among subject, act, content, object, but from the point of view of the different modalities of givenness of the sensible qualities of the objects, a givenness that is not simple but implies the co-operation of all the faculties. Only on assuming this, it becomes possible to explain why we can perceive not only a particular shade of red, but also the redness and why we have the perception/concept of the colour in general. All this implies the connections which Aristotle has already singled out between *nous poietikos* and imagination, between temporal course and givenness, between temporal course and production of consciousness.

Both imagination and temporality are determining for the «qualitative level of reality – emergent at the physical and also physiological level» (p. 80). So we are facing the problem «of the direction of the assimilative process. That there is a *direction* in the process of perceiving has been outlined by Aristotle himself. Still undecided, however, is the direction of the arrow: or in other words, does the assimilative process start from outside, in the sense of an affection of the soul by the stimuli, or does it operate in reverse, so that the sensitive activity starts from the inner formal articulations and moves towards exterior objects? Or both?» (p. 81).

The analysis on colour become generally paradigmatic of the complexity of the intentional act and of the way in which the reality is represented. Far from all form of the ‘myth of the given’, Brentano’s thought is since 1874 one of the most conscious form of consideration of the complexity of the ‘given’.

According to Brentano, the objects of our senses, like colours, sounds, warmth and taste, have a phenomenal character. Hence, they are signs of something existent, but they only possess reality within our sensations: «the objects of inner experience, or psychic states, like presentations, judgements or emotional states, are such that we immediately have ‘clear knowledge’ and ‘complete certainty’ in their regard, which makes them indubitably real and present» (p. 98). The measurement of phenomena and the perception of differences among them, «involve *qualitative* psychic factors» (p. 104); this is the reason why Brentano is not in accordance with the Weber-Fechner law, based on the logarithmic relation between variation of the stimulus and variation of the sensation: in according to Brentano, what is constant is their ratio. From this point of view, Brentano is criticizing Fechner’s work. «If Fechner’s intent was to discover a fundamental law on the measurement of the intensity of psychic phenomena, according to Brentano the fundamental flaw in his theory was that it treated as *equal* what was only *equally perceivable*» (p. 104). Brentano’s main question is then: «given that both psychic and physical phenomena have *inner character*, when we measure the intensity of phenomena, what is it that we are measuring: the act or the content?» (p. 105). The intensities of colours, of sounds are the intensities of physical phenomena because colour is not seeing, sound is not hearing. «For my part», so Brentano, «I admit that if, on the basis of Fechner’s method, a measurement could be found for the physical phenomenon, it could also be found for the psychic phenomenon in which the physical phenomenon is presented. Yet, it seems to me necessary to add the new restriction that only *one* aspect of the psychic phenomenon should be measured according to its intensity, namely its reference to its primary object, for we shall see that the psychic phenomenon has still other aspects and it is not exhausted by this one reference» (p. 106, quoted from *Psychology from an Empirical Standpoint*).

Correctly Albertazzi discerns in this problem the origin of the theory of intentionality and points out another Aristotle’s concept which Brentano shares: that there is a direction in the process of perceiving (*De anima* 414b 18-19, 428a 19-24), even if the direction of the arrow remains undecided: «does the assimilative process start from outside, in the sense of an affection of the soul by the stimuli, or does it operate in reverse, so that the sensitive activity starts from the inner formal articulations and moves towards exterior objects? Or both?» (p. 81).

According to Albertazzi, this problem, which is the focus of the entire psychophysical debate, has in recent times been clearly posed only by Köhler, in *The Task of Gestalt Psychology* (the Sander's work, *Structures, totality of experience and gestalt*, 1930, is quoted too), and «successively challenged by Gestalt psychology with its view of a *functional* correspondence between the spatio-temporal structure of events and their mode of behaviour in the field. A further development has been given to it by the analyses conducted by the exponents of the *Ganzheitspsychologie*, and nowadays a similar position is expressed by process theory» (p. 81).

Always beginning from Aristotle's thought, it is suggested the presence of another specific level, within the process of assimilation, responsible for the presenting of appearances in the perceptual fields. From this point of view, Brentano places himself at the crossing point of phenomenology and *Gestalttheory*, where they are sharing problems which in their variegated history have given even different solutions.

The chief problem is – I think – that «there are concrete universals of sense which arise from perception» (p. 88). He who is perceiving must be able both to perceive the most concrete and particular colour variations and to have the concept of redness and of a colour in general. This is the problem of the continuum, both as regards the colours and as regards more in general the givenness of a thing. What are the laws of sensations as psychic phenomenon and those of representations, judgements, affections, feelings? In according to Brentano, «*presentations present, exhibit the structure of what appears in the now*; consequently they are not a representation of the external world. In other words, the proper concern of the Brentanian theory of appearances is not the detection of a stimulus array (the contemporary standard concept of information) and/or the transformation and integration of multiple primitive components in the sense of viewpoint invariants, to use modern terminology. The connection between the content of presentation and its triggers is not taken into account, and put in brackets are the stimuli, or what are nowadays called transphenomenal correlates of consciousness» (p. 106). Albertazzi strengthens this main result of her own interpretation saying that «the objects of the psychic phenomena have the *phenomenal existence of appearances*» (p. 109), an important concept which connects Brentano with Husserl's phenomenology.

With regard to the problem of the appearance of a singular thing, it is of importance to remember the question of the space and the Lotze's theory of local signs: according to Brentano, «the problem is not spatiality of the sensible qualities but the fact that these are *sensed as localized*» (p. 108); Brentano returned to the problem of the localization of psychic phenomena (which Lotze has raised in his *Medical Psychology*) in *Researches in Sense Psychology* (1907) and in a number of passages in *Sensible and Noetic Consciousness* (1928) and in his dictations posthumously published as *Philosophical Lectures on Space, Time and the Continuum* (p. 108).

Brentano describes psychic phenomena as the only phenomena of which perception is really possible. Among the many and well-known problems concerning the intentional reference, that of the existence of the inner object of the act of presentation (one of the most controversial parts of Brentano's theory), gave rise to the great experimental work in the school of psychology influenced by his descriptive psychology, especially those of Graz and Würzburg, two of the branches of *Gestaltpsychology*.

From the Brentano's point of view, the acts of presentation, as psychic phenomena, have intentional existence, in that they are directed towards some sort of object or objectuality, but they also possess real, effective existence, and it is this that distinguishes them from physical phenomena which in consciousness are given merely as appearances. In referring to the question of the inner sense, Brentano can specify that, consequently, acts of presentation like knowing, rejoicing and desiring have existence endowed with evidence in inner perception, while colours, sounds and emotions, for example, have only mediated existence. The same applies to judgemental acts and contents. This difference is very interesting, because points out a certain autonomy of the colours and of the qualities in general, to which we will come back, above all why this puts the question of the mediation of a quality. It is the problem of the secondary object and of its specific modality of

consciousness. As Brentano says, «every psychic act is conscious; consciousness of it being given to its interior. Hence, every psychic act, however simple, has a dual object, primary and secondary. The extremely simple act with which we hear, for example, has the sound as its primary object, and itself, i. e. the psychic phenomenon in which the sound is heard, as its secondary object. It is conscious of this latter object in threefold manner: it presents it, recognizes it, and hears it [...]. The intensity of the presentation of the secondary object is in any case equal to that of the presentation of the primary object, and the same applies to the intensities of the judgement and the concomitant sentiment, to the extent that a presentation lies at their basis» (p. 115, quoted from *Psychology I*).

The problem of the secondariness is the more significant the more in its sphere colours and sounds present a modality analogous to the modality of judgements and feelings; these acts have an unitary form in a unitary whole, because the psychic act is a whole endowed with non-separable parts.

The psychic phenomenon in which the sound is heard, as secondary object, is that what the consciousness implies, it is the premise of the act as a whole and of the temporal continuum. Unity of consciousness is not its simplicity and this unity is produced by the complex structure of the secondary act, where temporal succession and development of perceptive continuum meet and whose result is the localization in the space. The psychic act is «*a whole endowed with non-separable parts*» (p. 116) in a mereological theory of psychic phenomena. Multiplicity and variety on the one side, continuity and unity on the other in the secondary act and in the development of consciousness are the questions more important for Brentano. «The interweaving between the *temporal simultaneity* that seemingly characterizes the unification of the *multiplicity* of the parts and the unification of the *multiformity* of psychic phenomena (which are not, in fact, homogeneous parts), both given in actual presentation, and the *spatial extendedness* (*Extensität*) that characterizes individual visual, auditory or tactile presentations, was one of the reasons that prompted Brentano to develop a theory of perceptive continua, in particular the primary continua of time and space» (p. 117).

The concept of act, «comprising both the idea of ‘psychic act’ and of ‘passive psychic affection’, performs a double role, psychological and metaphysical. The latter was spelled out in Brentano’s last writings, the former refers to the act of thinking when we consider its intentional character» (p. 110). From Brentano’s analysis psychic phenomena are resulting as «*succession of a continuous series of groups of simultaneous units* in a sufficiently continuous variation» (p. 118), an expression full of interesting problems, which Brentano has examined in *Psychology II* and *III* and among which is particularly exemplifying the problem of the colours. It is very opportune to have devoted a great number of pages to the problem of the colours, which are examples of intensive qualities, because the colour of the whole is not the sum of the colours of its parts, or a tactile stimulus noticed as it moves from one part of the body to another (p. 124). Seeing act and its content are different from colour and coloured objects; seeing act and its content have indeed an autonomous and specific existence. Red is at the same time the colour of an object, the quality of an appearing object, the content of my seeing act: as such it is my sensation of redness. Finally, more in general, still undefined was the status - physiological and/or phenomenological - of the sensations and therefore their eventual cognitive import: questions – as Albertazzi specifies - still unresolved today.

According to Brentano, «inner perception comprises, besides the *act* of presentation itself, not the object of the presentation as such but the *object presented*» (p. 113) and intensive magnitudes like colours «have a metathetic or positional order (qualitative, based on ‘different from’)» (p. 124); in general, «we had three colour phenomena: one pure red, one pure blue and one of an intense medium violet; Hering shows rightly that the intensity of this redblue, considered as a whole, would not be different from the intensity given by those pure colours which are near it. But also in the redblue the two colours, red and blue, subsist (we have proved this) in all truth included in its content. And about them it must be manifestly admitted that they here appear notably weaker than

they do where they are pure. (The equality of quality makes the comparison of intensities particularly easy and safe). *Therefore, the higher intensity of violet, equal to the intensity of pure red and pure blue, is composed here of trifling intensities of the two elements, red and blue* (p. 123, quoted from *On the Individuation of Sensory Appearances*, 1896). The function of an 'intermediate' is relevant in the problem of the colour and of being coloured too; more generally, it is the problem of unitariness and of the parts, which is fundamental in Brentano, in Husserl and in the *Gestaltpsychologie*. How we will see, Brentano connects the problem of the intermediate with that of continuum and devotes himself resolute to examine the laws of form organization with particular regard to the phenomena of auditory and visual presentation and to describe the facts and elements of psychic life and the laws that govern them from both a dynamic and a morphological point of view (pp. 120-1).

For these reasons I have much appreciated the fact that Albertazzi has at length discussed the brentanian idea of the colour, which is representative of the brentanian idea of intentionality, namely of the articulation of the intentionality in the representative act and in the represented object, or content, or appearance.

As correctly reminds Albertazzi, «at the time of Brentano, following the debate opened by Müller's theory of specific energies, the psychophysical law had posed the problem of the *qualitative status* of our perceptual experience but, as we have seen, failed to resolve a number of essential questions» (p. 124), like that of the perception of difference among perceptions quantitative (between two surfaces) or qualitative (between two shades of red) and like that of the content of the perception of difference: the intensity of the sensations themselves (acts), the processes of apprehension, or their content, the correlate red. Naturally, intensity is related to extensity, in the sense that the intensity of a sensible quality is a function of extensive magnitudes, a question which concerns all sensory modalities.

According to Brentano, «from our point of view, it is highly acceptable that to the composed sound must be due 1) an intensity of its own and 2) an intensity higher than the individual tones contained in it, that is *an intensity even made up of their intensities*. We find the very like in the sphere of the sense of sight» (p. 125, quoted from *On the Individuation of Sensory Appearances*).

Intensity has not parts but «the greater or lesser intensity of a colour on a surface is due to the greater or lesser density (empty space and filled space) of a given appearance, below the threshold of the noticeability of local differences. In other words, purple is a mixture of small, imperceptibly red and blue, particles. For this reason the presented intensity cannot be a magnitude and cannot be measured» (p. 126). Considering the relation between the whole and their parts with reference to perception, we are so led to the concepts of continuum and of limit, which are the root of those of unity of the soul, of the consciousness and its phenomena. We must speak not about simple quality but about multiple qualities (multiple sounds, nuances appearing in different colours), because «the qualities presented are generally not simple but several in number and play the role of *integral parts* of the whole. An example is given by Brentano in his analysis of the 'phenomenal green', a perceived colour with 'similarities' to yellow and blue independently of their physical mixture; or by the fact that red and green, antagonistic colours (as remarked by Helmholtz), can be perceived together, at the same place, for example in 'olive green'. The same hold in the auditory field for the pitch series, which can be analysed in terms of 'Dumpf' (dark) and 'Hell' (light)» (p. 137). We are facing with the following problems: the co-existence of the impenetrability of qualities and their composed perceptual nature; the comparison of the intensity of perceptions in different fields, «for example the difference between a loud sound and a faint odour» (p. 137). According to Albertazzi, «Brentano demonstrates the composite nature of the qualities in the appearance, the merging of the modes, and the presence of common components in all the perceptual fields, confirming once again Aristotle's doctrine of the existence of an intermodal perception. Furthermore, the idea of the existence of parts of appearances and the possibility that they have similarities in different perceptual fields are strong arguments against the atomism of sensations or, more generally, against the sense data tradition of qualia» (p. 138).

This is maybe the most theoretical considerable point of the presentation by Albertazzi dedicated to Brentano's thought, both for placing him in the history of philosophy, and for the emerging relation between the different ambits of his psychological and philosophical research: by means of connecting the concept of relation whole/parts and the concepts of continuum and of integration, Albertazzi is able to prove a deep unity in Brentano's researches on perceptions of qualities, on the constitution of thing and consciousness, on their spatio-temporal determinations. In fact, «at the basis of Brentano's distinction among the parts of the soul and their separability and otherwise lay the concepts of *perceptual space* and plurality of spaces relative to the problem of the continua (spatial and temporal), which interested him until the last years of his life. Brentano's analysis of mixed colours, which are not mixtures of the primary colours but are composed of juxtaposed phenomenal parts which are not noticed, and his analysis of noticing as such, led him to conclude that *the intensity of sensations* is nothing but a function of the *phenomenal space filled with a particular quality*» (p. 141). On this ground, it is possible to specify the Brentano's immanent realism because, according to the analyses of Brentano's empirical psychology, regarding both psychophysics and the descriptive theory of the soul, «*perceiving figures is a cross-modal spatial process* which comes about within a peri-personal, proprio-centric space and in which vision is the dominant modality» (p. 141). As regards the colours, they are marked both by a relative autonomous subsistence and by a tendency to limit. According to Brentano, when one uses the expression 'intense' with colours, he indicates «the full or nearly full uniqueness of a colour element. This is particularly clear with intense black, intense white, red, blue, yellow; if we speak of intense green as well, this could be explained by the fact that we are not aware of the combination of blue and yellow, which is yet straightforwardly denied by many, and also about orange and violet we were not perhaps so clearly aware as most are about grey, which was acknowledged as a mean and a blend between black and white. But maybe there is also no real internal consistency, and orange, violet and green when saturated are called intense only because they are then accompanied by a lively feeling which distinguishes saturated colours from unsaturated ones. On the other hand, he who in brown discerns red and yellow will certainly say that each of the two elements, according to its preponderance, is more intense than the other one and neither is as intense as where it is present as a pure colour. This has then similarity to the cases where several tones of various strengths are joined into a chord, and thus it appears that, after all, the expression 'intensity' is used here in a very similar way as it is for tones. The only difference is that, whereas a weak tone can exist in itself, black is always associated with a weak colour as a supplement in a complementary measure» (p. 142, quoted from *On the Doctrine of Intensity*).

More than to lead back Brentano's thought to the doctrine of Aristotle, as Albertazzi does in the following passage «the metaphysical outcomes of Brentano's analysis of the soul [...] led him to the conclusion that the sensible quality (accident) (i.e. the Aristotelian proper sensible), be it auditory, visual, tactile or whatever, contains *place* as its ultimate subject (substance), and that accidents attach to the single substance transmitted from one part to another. In this theory, still clearly Aristotelian, the soul in its potential aspects is viewed as a locus of immaterial forms which are altered by their perception» (p. 142), I think that it is important to emphasize how Brentano has been dealing with questions shared with his contemporaries, as in a series of writings like the *Researches in Sense Psychology* (1907) centred on the problem of *multiple qualities* in the various sensory fields. Brentano discussed the theses of Helmholtz, Hering, Mach and Lipps on the theory of colours, auditory perception and optical-geometric illusions; and he proposed the outline of a theory of perceptual space, of a theory of the temporal modes of intentional presentation, of a theory of continua and of the laws of their organization, which Brentano has studied for the rest of his life. According to Brentano, the sensory fields are perceptual continua which can be analysed «in terms of their part/whole structure – as already adumbrated in *Descriptive Psychology* with regard to acts of intentional reference» (p. 146), a point of view, which we will find in Husserl again.

In discussing the problem of the optical-geometric illusions, with reference to the article *On the Doctrin of Sensation* (1896), Albertazzi states precisely the discussion is important because it was

part of the debate between empiricists (Helmholtz, Zöllner) and nativists (Hering, Wundt) «which Brentano also joined by taking up a position in favour of the latter but with distinctive features of its own» (p. 147). Brentano's innatism is distinguished by considering the sensation as qualitative, spatially determined, in spatial relationships, independent of processes of logical-inferential and/or unconscious elaboration (on the contrary Helmholtz or Zöllner), «*further determined* with respect to the correspondance between the organization of the stimuli and the perceptual system, which was instead the *physical -physiological* position of Hering, or the purely physiological one of Wundt» (p. 147). Also on the ground of his investigations into perceptual illusions, concerning in particular his theory of judgement and the modes of intentional presentation, «which he revised during the years at the turn of the century» (p. 152), Brentano was convinced that perception comprises different forms of completion, involving types of cognitive integration.

This concept of cognitive integration is particularly interesting and deserves search because expresses the ability of an intermediate act. This integration involves the question whether the forms of completion responsible for perceptual illusions were presentations or judgements and involves the problem of the continuum, closely interconnected with the problem «of whether the *apprehension of the temporal differences* among the objects of presentation is given by differences *within the object* or *within its modes of presentation* » (p. 156) (researches developed by Marty, Husserl, Meinong too) (pp. 156-7); but also the problem of the analogy and differences between integration and original association, with that Brentano was dealing in the years 1873-1894, while teaching at Würzburg and according to Stumpf. Starting from the observation «that the object of an inner perception remains in the consciousness for a certain amount of time even after the stimulus has ceased – as shown by the example of a melody», Brentano concludes that «it is not possible to speak of *only one mode of the past* (or only one mode of the future). What instead occurs is a *constant flow of many modes of the past* (or of the future) in succession». But these temporal moments are not given in actual perception: «they are instead elements added to the sensations by the *phantasia* (the original association). Only what is *intuitively given* is present» (pp. 158). Temporal differences therefore «are due not to acts of judging but to acts of *presenting* with the intervention of the *phantasia*» (p. 159). In the years 1894-1904 Brentano continues to work on the aporias of the apprehension of temporal differences in the object of presentation, with some swings – as Albertazzi observes carefully – with regard the question if temporal differences are due to judgement, and in particular to the mode of judgement. The most important thing is that «every object has a temporal mode. This is not a mode that continually changes but a temporal *point*. Consequently, *only present objects can be real*. In this third phase, in fact, Brentano considered every object that is real now, or that will be or has been real as occupying an *objective temporal place* which is either prior to, contemporaneous with, or subsequent to other temporal places. However, we present the temporal continuum to ourselves as *a continuum of modes of recognizing* the object directed both towards the real and the non real» (p. 160), by the co-operation of different acts and intermediate functions as that of the *phantasia*. In fact, we daydream about temporal objects and it seems that temporal differences reside in the presenting and they are prior to judging. Moreover, we desire something in the present or in the future, and neither in this case are judgements involved, only presentations and feelings and «is this last point of view that prevails in *Psychology II*, although fleeting references to previous conceptions are made in all Brentano's subsequent writings» (p. 160).

There is a variant which concerns also the primary objects of the presentation and the modes of presentations, namely the role performed by the whole of consciousness. Brentano now points out that the successive presentations of the present, past and future object are not individual acts but they are parts of a whole. «In the temporal extensity – that is, in the time of presentness – we apprehend *being before* and *being after*: in other words, we have a presentation of the temporal duration. Moreover, the *temporal* modes, previously considered to be modes of presenting together with the direct and indirect modes are now considered to be included in the *indirect* modes, so that the only *direct* mode is the *present* one. Brentano's theory of time thus become a particular case of

the theory of the modes of presentation. Moreover, his theory of the modes of temporal presentation and the mereological theory of the parts of consciousness (set out in *Descriptive Psychology*) once again find a point of confluence and come to constitute the *change of perspective* which Brentano stresses at the beginning of *Psychology II* and expounds in the *Appendices*. According to the late phase, then, temporal determinations are the modes by which substance perceives the primary object of presentation, which is given in the indirect modes. Time is a determination of the object of our experience in so far as these are objects of inner perception. In a moment-now which is no longer punctiform and includes relations like 'before', 'simultaneous', 'after' and 'partial coincidence', the impression of the instantaneity of the actual content of a presentation depends on the fact that its extension coincides with the unitariness of our consciousness. In other words, duration is the objective characteristic note of the contents of presentations which renders them uniform. In this way Brentano's writings on time constitute the core of his immanent realism and act as a prelude to Husserl's analysis of internal time» (p. 161).

This long quotation stresses the most significant aspects of the Albertazzi's interpretation, among whose consequences is the meaningful connection between the analyses of the temporal modes of intentional reference and the consistency of continua. This is specially important because the analysis of continua, «which was also partly set out in certain passages in *Psychology III*» affirms the primacy of the temporal continuum over the spatial continuum and affirms the coincidence between the concept of a thing as substantially determined and that of 'temporal'.

The third chapter of *Psychology III* returns to the problem of the knowledge of the temporal absolute and its species with a 1915 essay whose original title was *On the Doctrine of Inner Perception*, focused on the close connection between Brentano's theory of intentional reference and his analysis of the temporal continuum.

This is compelling to come back to the problem of perceptive continua, with particular regard to the perceptions of colour. In fact the very time rises and shows itself in the integration from which are appearing the perceptive continua in the more and more complex forms of the different acts. The possibility of the continuous transformation of one colour into another, of the continuous transformation of a colour into a sound, and of the transformation of the continuum itself are further problems. Sensible objects belong to perceptive continua of various kinds (spatial, temporal, chromatic): an internal variation can come about in a particular perceptive content as a colour but cannot come about from red to sonorous, i.e. between different perceptive fields. «Sensible objects are *extended*, endowed with *form* and *qualified*, and sensible intuitions can be reduced to qualitative and local differences among phenomena, which is a conception already expressed by Brentano in *Descriptive Psychology* and reiterated in *Psychology II*. As to the differences in *intensity* of sensible objects (for example a darker red, a weaker sound, but also, sometimes, a sound clearer than another), a matter which Brentano had analysed since his investigations into the psychology of sense, these belonged among the qualitative properties» (p. 194). This point, in according to Albertazzi, again manifests his constant return to the thought of Aristotle; above all, here becomes meaning Brentano's distinction between sensible/intuitive and noetic knowledge. All the objects are both invariant nucleus and elements of series of possible variations; they are individualized in the space and qualitative determined, but at the same time they are still determinable in other perspectives, in consequence of a permanent relation between intuitive individualizing knowledge and noetic generalizing knowledge. According to Brentano therefore, «we cannot speak of a special sense of space; every external intuition contains spatial elements given with concrete qualitative determinations, and I can isolate the former by disregarding these determinations only by means of an act of noetic thought. If someone speaks of a sense of balance, however, then he isolates a special group of intuitions not on the basis of a characteristic that belongs to them as such, but because they provide a special point of reference for judging certain relations» (p. 194, quoted from *Sensory and Noetic Consciousness* (1928)). At the same time, two senses of the concept of the continuum are so outlined, that of continuum grounded on the analogy, and that sense according to which the continuum arises from the progressive, infinite diminishing of the parts. In the first sense,

in the same quoted text, Brentano says the sensible objects «though sensorially qualified, they are nevertheless qualified differently for each sense [...]. We see, therefore, that if we use homogeneity or heterogeneity of qualities as a principle of classification and as a criterion to determine whether objects of sensory intuition belong to the same or to a different class, we need a further criterion in order to determine homogeneity. It was pointed out that a continuum might possibly serve this purpose; it is possible to proceed continuously from note to note and from colour to colour, but not from note to colour.

[...]. Aristotle pointed out that there are two extremes in every one of the qualitative categories, e. g. black and white in colours, an extreme high and an extreme low tone in sound. Indeed, it appears that there is not only an analogy to light and dark colours in high and low tones, but that a similar analogy to light and dark is found in all sensory areas. If we compare the impressions of cold and warmth and if we ask which of the two would be called light and which dark, the unanimous answer would be that the cold appears relatively light and the warm appears dark. The same is true of sweet and bitter, the sweet being called light while the bitter appears relatively dark. It seems that in connection with colours, sounds and temperatures, we are dealing with lightness and darkness not in the same but only in analogous sense and thus we could say that we are dealing with different sensory areas when lightness and darkness appear not in the same but in an analogous sense. Hence, the question whether the sensation of temperature and other tactile sensations are homogeneous or heterogeneous relates to the question whether lightness and darkness subsist in them in the equivalent or analogous sense » (p. 195, quoted from the same text).

In these dictations, as in *Descriptive Psychology* and in *Researches in Sense Psychology*, Brentano highlights the question of the intermodal aspects of the qualities: are qualities homogeneous even between different phenomenal fields? Why can we say that a red is ‘hot’ and a blue is ‘cold’, or that there is a ‘black sound’ or a ‘white sound’? The homogeneity or heterogeneity of the sensations of the various sensory domains involves the question of the analogous existence, in these fields, of two qualitative extremes of lightness and darkness corresponding to hot and cold, sweet and bitter, according to the type of sensory intuition. From this point of view, Brentano can object to Lotze’s theory of the intensive qualities by observing that intensity does not have parts and that the phenomena «have a *density* which is due to the gradual *dwindling away of a series of extensive parts*. This happens, for example, when a surface changes colour from red to blue passing through violet: in this case, parts of red and parts of blue coexist, although they are imperceptibly small qualitative solids and blanks» (p. 196). Sensible aspects of the phenomena are its different parts and they are present even separately from each other in the sensory fields. Brentano notes: «all differences among sensory intuitions are derived, ultimately, from qualitative and local differences. As to the qualitative aspects, which are heterogeneous in every sensory area, and which are not synonymous with each other, but merely analogous. In one and the same sensory area they are homogeneous, thus it can happen that two phenomena, even though they have specific qualitative differences, appear equally light. Doesn’t that force us to distinguish between two other absolute components i. e. lightness and quality? Some might still be inclined to assume that in certain cases there exists only one darkness or lightness that corresponds to the respective sensory area, while in other cases, the above mentioned qualification is added. Thus a person might maintain that, as regards the sense of sight, black, white and the grey in –between are nothing but differences in lightness, while the so-called saturated colours reveal qualitative differences as well. Thus a red or a green could be of the same degree of lightness as a certain grey, but to the degree of lightness would be added another quality which the colour grey does not have. This would be a mistake in my opinion. Pure red has a certain lightness that belongs to this qualitative species, and this lightness would be the same as that of a particular shade of grey. But wouldn’t that mean that the red is part of the grey in that it shares its lightness, since the grey consists of nothing but in this lightness? One would have to say that the grey is mixed in with it, i.e. imperceptible small particles of grey which constitute its whole lightness, alternate with other particles, that are red and which do not partake of lightness or darkness. As to lightness, it would be the same as the grey, but less intensive, since the

lightness would be less dense in it. If I mix grey with pure red, then according to this theory the infusion of lightness would merely intensify that already given. But this does not seem to correspond to all the actual phenomena. In such a case we cannot speak of a greater intensity of lightness, but only of the occurrence of a deviation in quality, whereby the lightness remains the same» (p. 197, quoted from *Sensory and Noetic Consciousness*).

Brentano concludes his phenomenological observations defending the point of view that the lightness and darkness of the objects of sensory intuitions depend on the extent of their distance from black; lightness and qualification cannot therefore be separated out as two different qualities. Still Hering shared an analogy theory, experimentally tested by Meinong, Benussi, Musatti, all explaining «the intensity, saturation and brightness of sensations on the basis of the relation between continuous chromatic variety (colours) and continuous achromatic variety (greys)» (p. 198). The very important conclusion is that «the differences among sensory intuitions are all due to *qualitative* and *local* differences, and that the *local quality* is *homogeneous* for all the sensory fields and for all sensory intuitions» (pp. 198); this is the basis of a theory of knowledge which implies a continuistic integration.

According to Brentano, only the things given in evident manner by inner perception are existing and they are intentional presentations, that is «concrete *spatio-temporal structures* of psychic energy» (p. 233); Albertazzi defines them as «*pointers* towards phenomenal appearances like colour, sounds, odours and tactile perceptions (the ‘physical phenomena’), and secondly towards higher-order psychic objectuality of other kinds. From the point of view of actual presentation in the moment-now (*Jetzt*), we immediately perceive not ‘objects’ – which in Brentano’s late theory became synsemantic entities – but ‘aspects’ (characteristic notes) or at least ‘strings of events’ (like rotating discs). The ground of these phenomena is proximal space – that is, the visual, auditory, tactile, graspable sensible, *phenomenal space* (*Sinnesraum*) of our everyday experience. We characterise phenomenal space through our sight (shape, size position and movement), touch and kinesthesia (shape, size and distance), hearing (direction of sounds) and olfaction (direction of odours). The intensity of sense qualities is a function of the extensive parts of the phenomenal space» (pp. 233-34).

On the ground of this comprehensive presentation of the concept of phenomenon, Albertazzi is able to explain why Brentano has been a reference for a significant part of the thought of the nineteenth and of the twenty century, with particular regard to the concept of the phenomenon as continuum, in the ambit of a sort of empirical geometry of inner perception, in which the fundamental concept of direction of the intentional presentation «receives further specification as the *constitutive element of perceptive forms* (p. 234). According to Albertazzi, also «Brentano’s conception of continua was part of a neo-Aristotelian theory of physics put forward in various forms by authors of the period, mainly of German culture» (pp. 234-5), but I think it is still more interesting to show its similarities and divergences «with the theories of Herbart, Überweg, Lipps, Mach, Helmholtz, Blumenfeld, Hillebrand, above all because Brentano’s theory «gave rise to phenomenological and/or gestaltist analyses by Husserl, Bühler, Selz, von Allesch and, later, by Musatti. All these authors, in fact, evidenced the *grounding of continua in the world of perception*»(p. 235).

Albertazzi herself points out that, besides their aristotelian origin, Brentano’s theories on continua were influenced by Überweg and his empirical conception of perceptual space. Überweg elaborates the notions of the «*space as a homogeneous continuum of places* able to divide itself and to extend itself indefinitely from any whatever part that a body may occupy, and in any whatever direction that it may move» (p. 237); of the points as indefinitely small spaces.

According to Überweg, the concept of homogeneity concerns the appearance of perceptive space and «the constant transformation of objects in the visual field according to how they appear from different perspectives» (p. 237): the perceptual space is homogeneous, continuous, unbounded. «Empirical and descriptive analysis only recognises ‘the indefinitely small space’ – that is, the *progression of the division*. A crucial feature of the theory is, then, that a geometrical point is only

an idealised location. Moreover, perceptual points have an *intrinsic structure*. From a *perceptual point of view*, in fact, a ‘point’ is *a location with different possible directions*: points may have parts and coincide with parts, exactly as parts may coincide among themselves [...]. Thus the concept of *boundary*, which as the *outermost element identifies a perceptual form*, is the *fundamental fact* about phenomenal space. The points and lines that delimit a surface are examples of the bounding of perceptual space. Moreover, boundaries are never given in isolation: they are always part of larger spatial forms, as Brentano too would later maintain. Boundaries have an *inner* and an *outer* side, as evidenced, for example, by the phenomena relative to figure/ground organisation in perception» (pp. 238-9). It is very interesting to connect Überweg and Brentano, as well as Brentano and all the discussions of continua (also mathematical ones) conducted at the end of nineteenth century and the beginning of the twentieth. «More generally, at issue were the nature and the laws of *psychophysics* that provided the basis for the notion of continuum. This was one of the questions at the centre of Brentano’s inquiries, and it is a question still unresolved in contemporary science» (p. 239).

Against the mathematical theories of continua Brentano contests the reduction of the extendedness of perceptual phenomena to quantitative metric extension. On the contrary, it is necessary to study the specific nature of perceptual space-time, and to resolve the problem of measuring perceptual phenomena (what do we measure, asks Albertazzi again, the act, the object or the content?), and finally the problem of how to model phenomena correctly. An *empirical* theory of continua for Brentano is a descriptive theory of phenomenal continua as they appear in the various perceptual fields. From another point of view, Brentano offers a metaphysical theory based on «the *bearer* of the intentional reference, the ‘thinker’ as the ultimate metaphysical entity of Brentano’s metaphysics» (p. 240), in the ambit of an ontologically grounded epistemology.

As Albertazzi reminds, the main texts for Brentano’s analyses of perceptive continua are *The Theory of Categories*, published posthumously by A. Kastil in 1933, and *Philosophical Investigations on Space, Time and the Continuum* published posthumously in 1976, with added notes by Kastil and edited by S. Körner and R. M. Chisholm (p. 240).

According to Brentano, «*what is continuous must be given to us as an individual intuition* and must therefore be abstracted there from» (p. 241, quoted from *Philosophical Investigations on Space, Time and the Continuum*).

On the basis of the results of his investigations into the nature and number of the properties of phenomena, from *Descriptive Psychology* to the *Appendices of Psychology II* and to *Psychology III*, Brentano, who - according to Albertazzi - «develops a *qualitative* Aristotelian theory of phenomenal continua and of *place due to a contact between parts*» (p. 242), considers the continuum as an intuitive concept. Locality, quality and lightness are the fundamental characteristic notes of the objects of visible space: «its parts (of the homogeneous mass), like the part of a blue surface, are all the same in quality, but differ from each other spatially. In respect of place, there are infinitesimal differences; every specific difference (i. e. very *absolute* spatial kind) exists only as a punctiform boundary, and its nature is determined in part by that which is bounded. This is why the spatial nature of a point differs according to whether it serves as a boundary in all or only in some directions. Thus, a point located inside a physical thing serves as a boundary in all directions, but a point on a surface or an edge or a vertex serves as a boundary only in some directions. And the point in a vertex will differ in accordance with the directions of the edges that meet at the vertex. Thus coinciding points may be said to differ with respect to their spatial nature, with the result that it will not be absurd to say that one of them is blue and the other red» (p. 243, quoted from *The Theory of Categories*).

Brentano can also affirm that «the concept of the continuous is acquired not through combinations of characteristic notes taken from different intuitions and experiences, but through abstraction from unitary intuitions» (p. 244, quoted from *Philosophical Investigations on Time, Space and the Continuum*, pp. 6-79). In spite of the fragmentary form of the texts constituting the *Philosophical Lectures on Space, Time and the Continuum* and those of *The Theory of Categories*, the position of

Brentano is evidently very interesting from two points of view, that of the relation between intuition and abstraction, and that of the identification of the sensation both with quality, lightness/darkness, saturation and with place and individuation based on the impenetrability of qualities. This means that intensity of a sensation derives from its extensity and is «*reducible* to the opposition between *full and empty*, and between *light and dark*» (p. 245). As will be in Husserl, the concept of fullness has a great importance in Brentano, because «every place in the space of the senses can be filled by *one single* qualitative instance (i.e. by sound, colour, or quality of contactile sense), so that the intensity of sensations therefore depends on the *greater or lesser fullness of the phenomenal space*, given that this space is proportional to the density of the places filled by the sensations themselves» (p. 245). If the intensity of a phenomenon varies, therefore, «what we perceive is not *the same phenomenon with different degrees of completeness*, but rather *different things with the same degree of completeness*. Thus, a sound heard as a continuous variation of intensity, or a colour seen as progressively fading away, are not the same sound or the same colour. They are instead *different entities given in different ways* in relation to their different locations in phenomenal space (in this case of sound or colour)» (p. 245). Continua therefore are all multiple and ripropose all the questions concerning the relations between the parts and the whole and the concept of boundary, also on the basis of the distinction between primary and secondary continua; «*primary* continua are *uniform* (homogeneous) and endowed with *constant direction* and *velocity*. In particular, the primary continua consist of all differences of place, time and space.

Superimposed on the primary continua are the *secondary* ones, which are *co-extensive with the former but heterogeneous, marked by different kinds of boundaries*, and with different degrees of direction and velocity. Moreover, time is a *primary* continuum with respect to space and space is primary with respect to the secondary continua. As we have seen, according to Brentano and following Überweg, *space* as a whole is the *homogeneous series of positions* filled by qualitative instances which can be constructed according to structural laws, that is, according to the system of places» (p. 246). It is fundamental for the perception-based theory of continua of Brentano to distinguish between primary continua and secondary continua: the primary continua are uniform and possess constant velocity and direction; the secondary continua manifest change of direction, with different degree, intensity and velocity. The main problem is how establish the boundaries, which, according to Brentano, never exist in isolation. «In perceptive reality there are no points, lines or surfaces as entities in themselves, *isolated from the field* and from the *surround* in which they are manifest. We may draw on Überweg's theory to exemplify the layering and embeddedness of continua thus: a 'point' is the inner boundary of a 'line', a line is the inner boundary of a 'surface' and a surface is the inner boundary of a 'solid' (which is also Poincaré's argument)» (p. 249). In Brentano words: «We can distinguish continua which exist only as boundary of some other continuous» (p. 249, quoted from *Philosophical Investigations on Space, Time and the Continuum*). Boundaries are non-independent parts or moments of the continuum; boundaries and coincidence of boundaries may in principle be indefinite, as demonstrated by the phenomena of perceptual fusion (*Verschmelzung*) of the different aspects. As Albertazzi recalls, the intensive qualities are reconducted to the extensive ones, as in *Descriptive Psychology* or in a paper that Brentano has given in 1869 to the Congress of Munich on *Individuation, Multiple Quality and Intensity of Sensible Phenomena*. For an example, in a red and blue chessboard, if the spatial extension of the red and blue squares is progressively reduced, we obtain the perception of violet, but «there is an intermediate moment in which the chessboard is perceived as *something simultaneously red and blue* (think, for example, of a Seurat painting) but *not* in the *same positions*. This means that what happens is a superimposition of perceived attributes. This 'rendering' comes about for mainly two reasons: the first is an assimilative phenomenon which occurs when the coloured areas are small but still distinguishable; the second concerns the blue, since the margin that it forms with other colours (generally with all colours, but especially with colours of the same brightness) is not stable but tends to 'shift', as in Helmholtz's 'fluttering heart' illusion. It is these two phenomena that produce the impression of movement. What is continuous here assumes the character of 'reddish' and

‘bluish’ and again displays the feature of a coincidence of boundaries. These boundaries are both red and blue, but neither colour is in full ‘plerosis’ (direction)» (pp. 253-4). This is a phenomenon of density in the sensory field, a phenomenon of emptiness and of fullness, a kind of weakening or diminishing of the phenomenon (p. 254). Among the consequences of the thesis of the extensity of phenomenal space and of the principle of the impenetrability of qualities there is to negate the existence of intermediate colours and to affirm instead the existence of mixed ones. «Colours other than the fundamental ones are therefore considered to be mixtures of the latter: hence, orange, violet, and so on, are perceived as such because the fundamental colours are *present within then in spatial phenomenal particles below the threshold of perception*. This is therefore a further case of extensive magnitudes and in particular of *a gradual disappearance of extensive parts*, although it should be borne in mind that these are parts of the *sensible field*, not parts of the space of the physical world. In short, once again, this is a matter of the greater or lesser density of the *phenomenal manifestation* in the intentional presentation» (p. 255). Unlike in other cases, in this regard it can be useful to quote some words of Kastil, who, while commenting on a dictation in *The Theory of Categories*, observes: «thus if two colours, red and blue, are alternated with each other in the noticeable parts of sensible space, then the whole is perceived as violet, hence as reddish blue, and within this whole both red and blue or pure red. If one of the two colours were removed from the visual field and replaced with empty (but not black) places, the resulting quality would have what is called diminished intensity. If both the filled and empty portions of the field were large enough to be noticed, we would perceive a clear juxtaposition of filled and unfilled places; we would not be misled into assuming that we are dealing here with any so-called intensive magnitude, or a magnitude that has no parts. Only because the individual parts are imperceptible and because all parts together produce the total impression of a less intense colour, do we have the illusion of a special kind of magnitude without parts, that must be distinguished from extensive magnitude. And so in fact, the so-called degrees of intensity pertain to extensive magnitudes which are divisible into parts. They pertain in other words to the greater or lesser density of a given appearance (below the threshold of noticeability of local differences)» (p. 255). There are many important consequences: the points, as the smallest parts of spaces, may themselves have parts; the direction influences the degree of grouping into perceptual units. Very interesting examples of the role of direction in perception are phenomena of amodal completion (as Helmholtz himself remarked), where the direction of the contour of the occluded figure changes, or phenomena of texture segregation and of figure/ground organisation. Moreover, «the perceptive points may also coincide with parts, exactly as the parts may coincide with each other. In the case of a red disc, for example, the *median point* of the disc is also the *point of origin* of the various individual radii. Consequently, Brentano concludes, every point of a two- or three- dimensional continuum is an *infinite* (and compressed) *collection of distinct points*. It is for this reason that a geometrical or mathematical point is an *idealized place*. For the points have an intrinsic structure: indeed, from a perceptive point of view, a point is a *place with different possible directions*» (p. 261). There are still noticeable consequences, as such that boundaries may be external and internal and that internal and external borders are of crucial importance in the formation of perceptive patterns: the boundaries of the primary continua (space and time) are all internal while «external boundaries are only identifiable in the *qualitative filling* of spatio-temporal structures according to the nature of internal presentation. In other words, *discontinuity* always arises and appears from *an underlying spatio-temporal continuity*. Examples are a region of space coloured in two different ways, or an object which starts from a state of rest to move from right to left» (p. 261). On one side, Brentano continues a refined analysis of types of continua (like multiform continua); multiform boundary is therefore «the boundary of a continuum which is unitary (not multiple) but variously *differentiated*: that is, constituted by *non-independent parts or moments*: for example, *a seeing* a region of space, *a hearing*, *a thinking* something in the actual moment» (p. 262).

The problem of the continua binds itself with the problem of the consciousness and with that of its unity, because the continua are the intentional objects of the consciousness. Every thing that intuit

a continuum is itself a continuous multiplicity (*Vielfaches*) and not a plurality (*Vielem*). Example of a multiform continuum is that two places which are not consecutive and are independent of each other may be perceived together; example of a multiple temporal continuum is a series of sounds in sequence, while an example of a multiform temporal continuum is a melody: all they are acts of intentional presentations and self psychic acts or intentional presentations – the foundations of the descriptive psychology – can be defined as multiform continua, topical continua (existing in all their parts), continua composed of homogeneous and connected parts. There is a connection between inner perception and continua: «the *inner perception* of an object takes the form of a *multiform and temporally continuous continuum* because of the *temporal modes in which the spatial qualities manifest themselves* in accordance with the process of original association (proteraesthesia). Indeed, inner perception is the *locus of original intuition of continua* (relatively to spatial and temporal objects) which unfold as *perceptions of themselves qua multiform continua*. Brentano's reflection on continua therefore form the basis of a metaphysical theory founded on proprioception» (p. 263).

Gestaltpsychology and the experimental phenomenology have confirmed some aspects of Brentano's theory of continua of which main merit is to highlight the complexity of phenomena-in-act in perception; it is deriving «from the *superimposition of diverse continua*, multiple and multiform, concomitant with each other, in actual presentness, thereby confirming some of the key hypotheses of Brentano's descriptive psychology. Moreover, his theory is the first step towards a geometry of cognitive (perceptual) space» (p. 266) and has been developed by Meinong and Husserl.

They have studied the genesis of continua, considering their extensity as the product of a continuous series of increments in any whatever phenomenal property, even temporal, of continua themselves: «every incremental series becomes a total continuum, so that *every actual extension* is a part (or section) of the incremental series of phenomena in a particular perceptive field (for example, the series of the pitches of sounds versus the series of their intensities).

Characteristic of all incremental phenomena, moreover, is the *transposition* of forms and the fact they can be related to the *opposition and continuous transition between light and dark in all the sensible fields*. The problem of the homogeneity and the heterogeneity of sensations thus reduces to their *lightness or darkness* in analogous sense – an outcome of the *Researches in the Psychology of Sense* – so that the lightness of tastes, for example, corresponds to the lightness of temperatures, etc. Experimental analyses based on these theories have been conducted mainly by Benussi, Selz and Bühler, who thus laid the bases of intermodal perception analysis» (p. 267).

A theory of continua requires on one hand a process of integration of their manifold aspects, on other hand the determination of the boundaries of the continua and their individuation. After highlighting the continuity of every perception and of the whole perceptive field, it becomes necessary to border and to delineate every single thing or event and the same time to delineate the "Erlebnisse" of the consciousness, that is the stream of the life of the consciousness.

«For Brentano, the principle of individuation of an entity – as it intentionally exists – consists in what distinguishes it in content from other things that fall under the same concept in which it can be thought. For example, what marks off *the red* from *the coloured* cannot be thought: it is in this difference, therefore, as regards quality, that the individuality or haecceity of the entity in question consists. In other words, the concept of *red thing* contains within itself the concept of *coloured thing*. I may subsequently specify a *coloured thing* as a *red thing*, a *coloured thing* as a *two-foot-long thing*, then consider a *two-foot long thing that is coloured and flavoured*, and also *red and sweet*, and so on, thus obtaining a series of specifications which range from a *species specialissima* to a *summus genus* which cannot be generalized further. By rejecting Aristotle's claim that one and the same individual cannot be defined by means of diverse proximal differences of the genus under which it falls, therefore, Brentano affirms that the concept of *ens reale* – or *thing* – is the only *summus genus*» (pp. 274-5).

A large number of questions are concentrate, from that of logical differentiation of general and particular at the different levels of the reality to that of the constitution by localization, which Albertazzi defines as metaphysical in this sense: «Brentano's theory of substance, his theory of continua, and his theory of intentional reference are different facets of the same metaphysical problem, given that *red thing*, *red and coloured thing*, and so on, contain a spatial determination, a qualitative localization and a temporal determination. They are therefore elements of the presentational continuum already analysed in *Descriptive Psychology*» (p. 275).

But the main problem is the determination of individual realities as limits of continuous processes and the answer to the question about the meanings of "real". This is a general theme of Brentano's thought during all his life, from discussing the different meanings of the being according to Aristotle to *Psychology III* and to all the *Nachlass*; a theme strictly connected with the question of the continuum. The individualization is always involving localization; therefore Brentano can affirm that there are not intuitive absolute places/determinations.

We are perceiving by intuition relative places which are involving absolute places only in general – on the analogy of the intuition of the greater and the smaller, that is of the relatively great which only is accessible to us and which involves the intuition of the great in general. The representation of relative places is not depending on an usual comparison but is an original relational representing involved in sensing. Something analogous happens with regard to time intuition, since also in it is understood something relative, which is a relational representation (from a footnote of O. Kraus at § 20 of *Psychology III*). It seems to me is here clear the peculiar connection which is by Brentano defined, even if always problematically, between intuitive and noetic knowledge - the capacity of seeing the general. In fact noetic thought is analysing and making know absolute local relations presupposed by sensible local relations (§§ 11-13 of the *Fenomenognosis of the sensible and noetic consciousness* in *Psychology III*). On the one side all sensible intuitions are individual and differentiated because of localisation, on the other side the concept allows to derive the presupposed general relation (§ 15). According to Brentano, there are degrees of generality (§ 6, chap. 2, II part of *Psychology III*); therefore, general concepts of thing, of colour, which are continuous, are preceding the particular-individual concepts, which are their limits. From a methodological point of view, this couple of concepts (continuum/limit) explains both the formation of all other concepts and the relations between intuition and concept: every of these is a limit of a continuum. In this way it is possible to resolve the problem of the existence of the concept of a pure black, never given in the sensible intuition: it is derivable from an analysing, seeing the difference, comparing process. In the concepts of red, blue, point, right line also there are complex processes. Therefore the red concept is not only intuitive but also ideal. Our intuitions – both the inner and the external - have a certain indeterminateness and generality, because they are free from all specific temporal individualization (§12). According to Brentano, to perceiving is complex in analogy with to representing – the more important act of intentional attitude - because of the necessary interaction of external senses and inner sense. It is a great merit of the book of Albertazzi to have showed how are interacting in to perceiving-representing external and inner moments of to perceiving, so that from the boundary/limit of external/inner perception is aroused the inner sense as primary form of consciousness.

Further investigations in Brentano's thought must still precisely analyse in which manner intuitive and noetic processes can both interact and differentiate in order to realize all the possible and most distinguished perceptive shades in the various perceptive fields. From this point of view it will be very interesting to compare Brentano and Husserl, above all with regard to problematic of the passive syntheses, by Husserl developed in the twenty and thirty years, in the manuscripts of *Esperience and Judgement* and of the *Crisis of the European Sciences*. Nevertheless, there are remarkable differences between Brentano and Husserl, who has defended unlike Brentano the transcendent conception of the correlative processes. Neo-aristotelism, herbartian and lotzean tradition meet in Brentano both with the influence of English philosophy (Mill, Bain), and with a kind of neo-leibnizianism. The philosophy of the small perceptions, of the shades in the genesis of

the consciousness and above all of the continuum offers concepts still useful in order to explain the questions of the inner sense and of the intermediate degrees of the consciousness between intuition and noetic knowledge. Brentano can therefore say that there are not individual intuition, showing from an antiriductionist point of view how nothing is more complex than the givenness and its perception-representation. Represented objects are then always limits of a continuum, individuations in a horizon of generality, in a process which is not a simple to abstract but a complicated to distinguish and to compare. The outcomes are not only concepts of intuitive unity but involved thoughts, which relate many things thought *in recto* and *in obliquo*. All the things, all subjects are in general the limits of a spatio-temporal continuum (§§ 6-7 chap. II, part II of *Psychology III*). Ourselves are, in the inner perception as a temporal continuum, its limits each time delineated. Also unlike Leibniz, space and time are not only relative; there are general representations of comparative relations, in which we will uncover by a more precise analysis involved absolute determinations: local, temporal are absolute, distance is relative. In determining that is distant in the space or in the time is involved the determination of spatiality and temporality in general (§ 11). That is determined and that is general are not existing separately but as correlative limits, as limit of each other. In order to determine such a complex process, it is necessary to work together of intuition, fantasy, concept, because temporal and spatial concept is coinciding with the concept of thing determined in all its aspects, of a substance (§12). I agree with Liliana Albertazzi when she says, in her introduction to the Italian translation of *Psychology III*, Brentano in all his life has always analysed again the moment-now of the intentional representation in its foundation, structure, metaphysical implications. More than talking about a first and a second Brentano, it is necessary to talk about a philosopher who progressively investigate his fundamental thesis of the intentional reference and the manners in which the psychic act has something as object. In this sense, Brentano's reism is – according to Albertazzi – a sophisticated metaphysic of proprioception – and – I add – a philosophy of consciousness also, which brings to an end Herbart's criticism of the theory of the faculties of the soul. According to Brentano, at the end of his intellectual course, they must dissolve in that continuous, complex stream of life of the consciousness, on which has reflected to a great extent the philosophy of the nineteenth and twentieth century. Above all, as «an antidote against physicalism and logicism, which dominated the 20th century epistemology, and as such appears to be a good philosophy candidate for cognitive science» (so, the inside cover of the book), Brentano pointed out problems more fruitful than some cognitivist simplifications.