

Objectivity in the Beginnings of the Positivism: Dispute between Auguste Comte and Émile Littré

Masahito Hirai

1. Introduction

The history of scientific objectivity is surprisingly short. It first emerged in the mid-nineteenth century and in a matter of decades became established not only as a scientific norm but also as a set of practices, including the making of images for scientific atlases. However dominant objectivity may have become in the sciences since *circa* 1860, it never had, and still does not have, the epistemological field to itself. (Daston and Galison 2010, 27)

Daston and Galison have revealed that objectivity as a scientific ideal can be traced back at most as far as to the mid-nineteenth century. Historically, as Machiel Karskens focuses (Karskens 1992), the concepts of objective/subjective has both *traditional* and *modern* meanings: the former shows that objective signified *representations* in one's mind, while subjective mainly indicated *things* in the world; the latter says that the concepts of objective/subjective generally correspond with those of world/mind. Although they were almost obsolete during the seventeenth and eighteenth centuries, they were newly revived by Kant in *Three Critiques* (Daston and Galison 2010, 30). With the reception of Kantian philosophy in Europe, they have been introduced into the modern scientific and philosophical thoughts, such as Positivism (Daston and Galison 2010, 207).

Indeed, especially in the *Système de politique positive* (1851–1854), Auguste

Comte (1798–1857) suddenly began to repeat the expressions of the *méthode objective* (objective method) and the *méthode subjective* (subjective method). Apparently, his objective method referred to either the ideal of scientific procedure such as the experimental method promoted by Claude Bernard (1865), or the ideal of scientific attitude such as the objective method proclaimed by Émile Durkheim (1895). However, if the objective method is intended for “the suppression of some aspect of the self” (Daston and Galison 2010, 36), Comte never introduced it in *his* Positivism. Rather, at least in France, objective method in this sense was included in Positivism by his disciple Émile Littré (1801–1881).

The purpose of this paper is twofold. First, it will clarify why Comte adopted the concepts of objective/subjective, and how he used them. Second, it will analyze why Littré condemned his subjective method so vehemently that he declared his master to be insane. Then, it will be clear that one of the principal reasons for the collision between them consisted in the difference in the implications of objective method and subjective method between Comte and Littré. While Littré defined objective method as a scientific virtue and subjective method as a scientific vice in a dualistic manner, Comte meant by them the two different ways of constructing a new spiritual system in stead of the Christianity.

2. The Concepts of Objective/Subjective in Auguste Comte

Until Kantian philosophy became accessible to many of the French scholars, people hardly used the concepts of objective/subjective during the seventeenth and eighteenth centuries. At last in 1835, Joseph Tissot translated *Kritik der*

reinen Vernunft (originally published in 1781) from German to French for the first time. Before this publication, there had been some commentaries on Kantian philosophy written by French philosophers between 1796 and 1804. They contributed to distributing the “official representation” of Kant (Azouvi and Bourel 1991, 7), and attempted to define his neologisms, such as objective/subjective (Villers 1801, 113).

Similarly, Auguste Comte never used them in his writings until he referred to the name of Kant. In the sixth volume of the *Cours de philosophie positive*, he praised Kant for inventing “his famous idea of the double reality, at the same time objective and subjective” (Comte 1842, 724). Moreover, the same remark appeared in the *Discours sur l'esprit positif*: “the luminous general distinction sketched out by Kant between the two *objective* and *subjective* points of view” (Comte 1844, 24). These passages prove that Comte attributed their introduction to Kant’s genius, and borrowed them into Positivism.

However, just after admiring Kant’s talent, Comte immediately criticized Kant. “[T]his happy insight [...] could never be sufficient to institute a really positive philosophy” (Comte 1842, 724). In fact, Comte’s critical attitude toward Kantian philosophy was consistent, and expressed an antipathy toward Kant’s absolute feature of metaphysics in the correspondence dated August 5 1824 with his disciple Gustave d’Eichthal: “The absolute [...] seems to be a fundamental character of Kantism which [...] creates a very overwhelming obstacle for positive philosophy” (Laffite 1896, 236). That is to say, while Comte approved one side of the Kantian philosophy such as the introduction of the concepts of objective/subjective, he blamed another metaphysical side. In the *Catéchisme positiviste*, Comte considered Kant’s “fundamental conception was not truly systematized and developed only by the positivism” (Comte 1891, 5).

As a result, Comte freely interpreted Kant’s neologisms in order to fit them

with his Positivism. Although Kant originally had a tendency to equate objective/subjective with universal/particular (Daston and Galison 2010, 30), Comte diversified their meanings, and used them at least in three major uses: (1) an *epistemological* use; (2) a *religious* use; (3) a *monistic* use.

First, Comte mentioned the neologisms in the *epistemological* use, especially in scientific contexts. For example, in the *Traité d'astronomie populaire*, Comte lectured about astronomical observations, and called attention to the *illusions subjectives* (subjective illusions). They meant a set of obstacles which observers had to avoid in order to know the real position of stars from the apparent position. According to Comte, in order to acquire accurate observed values, it was essential to consider the five theoretical rectifications: refraction, parallax, precession, nutation, and aberration (Comte 1844b, 326). Here, the question was the relation between a subject (observer) and an object (star), and how to know the truth (position of the star). Moreover, in the *Catéchisme positiviste*, Comte defined this epistemological use more generally: objective signified the contemplated *object*, and subjective meant the contemplating *subject* (Comte 1891, 50). It can be said that the concepts of objective/subjective in the epistemological use almost corresponded to their modern use.

Second, especially in his closing years, Comte originally invented the *religious* use of objective/subjective. It is widely said that Comte suddenly switched his interest from philosophy to religion since around 1845. In fact, according to Mary Pickering, Comte intended first of all to reorganize social unity destroyed by the French Revolution, by constructing a new religion as a substitute for the Christianity (Pickering 1993, 5). After publishing the *Cours de philosophie positive*, he founded the Religion of Humanity, and expounded its doctrine in the *Système de politique positive*. The concepts of objective/subjective similarly appeared in this context. For example, in the *Catéchisme positiviste*, he

clarified it as follows:

[W]e must determine two successive existences in each true servant of Humanity. The first one is temporary but direct, and comprises life in the strict sense of the word. The other is indirect but permanent, and only begins after death. The first being is always corporeal; it can be qualified as *objective*. Above all, it can be contrasted with the second, which deserves to be called *subjective*, based on letting people survive only in the hearts and minds of others. That is noble immortality, necessarily immaterial. Positivism recognizes immortality according to our *soul*, while conserving this precious term to designate all intellectual and moral functions, without referring to the corresponding entity at all. (Comte 1891, 67)

His concept of Humanity contains all *living* people (*objective* existence) and all *dead* people (*subjective* existence), irrespective of the past, present, or future. Here, the concepts of objective/subjective referred to those of physical/spiritual. He used Kant's neologisms to distinguish the living people from the dead people in the religious context. Fundamentally, this religious use of objective/subjective also corresponded to their modern meanings.

Third, Comte mentioned them in the *monistic* use. In the post-revolutionary France, many thinkers deplored the state of mental disorder caused by the fall of Christianity and the propagation of the egoism, and hoped to find another religious doctrine. For example, Saint-Simon affirmed that Newton's law of gravitation would be a unifying principle of new religion (Pickering 1993, 67). According to his "physicism," all natural and moral phenomena could be ultimately explained by the law of gravity. Based on this principle, which would create the consensus of ideas, Saint-Simon believed that the unity of society

could be reorganized. Although opposed to Saint-Simon's reductionism, Comte also intended to construct a monistic doctrine based on the positive sciences. The *Cours de philosophie positive*, where he analyzed each of the six fundamental sciences (mathematics, astronomy, physics, chemistry, biology, sociology), was a preparation to construct a new religious doctrine.

However, he stressed the difficulty in discovering through the study of the complicated external world a universal law of nature, such as the law of gravity for Saint-Simon. For Comte, each kind of the natural phenomena could not be reduced each other. He considered that it was impossible to reduce chemical laws, or even, biological laws to the law of gravity. Although he counted up almost all branches of knowledge, there still remained an rigid irreducibility of the distinct natural phenomena. For example, in the *Discours sur l'esprit positif*, Comte stated as follows:

The harmony of our ideas is necessarily limited, to some extent, by the fundamental obligation of their reality, that is to say, of a sufficient conformity to the types [of natural connections] independent of us. By its blind instinct of connection, our intelligence almost aspires to be always able to link any two phenomena between them, whether they are simultaneous or successive. However, the study of the external world, on the contrary, proves that many of these connections would be purely fabulous, and that a mass of events continually occur without any true mutual dependence. [...] Not only the six fundamental categories which we distinguished below between the natural phenomena, could not certainly be all reduced to an only universal law. (Comte 1844, 22–23)

Thus, according to Comte, in order to integrate each of the different kinds of

natural laws into a unified doctrine, it was necessary to adopt another way to construct a unified system of knowledge.

Comte claimed that there were two different ways to construct a unified system, namely objective method and subjective method. The former referred to the way to start from the *world* (cosmology) to the *man* (sociology) by way of the *life* (biology). On the contrary, the latter meant the inverse way, from the man to the world. In the *Système de politique positive*, Comte declared that he changed the objective method, which was dominant in the *Cours de philosophie positive*, for the subjective method (Comte 1851, 4–5). While the objective method attempted to discover an only universal law of nature in the external world by means of analysis, the subjective method makes effort to synthesize every branch of knowledge by relating them with the Humanity. First, in *Discours sur l'esprit positive*, Comte explained it as follows:

Considered in the first side [the objective point of view], that is to say, as for the external destination of our theories, as exact representation of the real world, our science is not certainly open to a full systematization, because of an inevitable diversity between the fundamental phenomena. [...] It is quite different in the other side [the subjective point of view], that is to say, as for the inner source of the human theories, regarded as the natural results of our mental evolution, both individual and collective, destined for the normal satisfaction of our any proper needs. So related, not to the universe, but to the man, or rather to the humanity, our real knowledge, on the contrary, with an evident spontaneity, tends to an entire systematization, as scientific as logical. (Comte 1844, 24)

In other words, Comte claimed that, while the unified system of knowledge

could not be constructed by trying to discovering the unifying principle in the external world because of the irreducibility of the natural phenomena, it could be achieved by presenting the goal of utility for the humanity. In the *Système de politique positive*, Comte repeatedly stressed the importance of collaboration between the objective method and the subjective method. “Our logical constitution could not be complete and durable only by an intimate combination of the two methods” (Comte 1851, 445–446). Without a goal of sciences which was provided by the subjective point of view, Comte stated that any effort to construct a unified system led to atheism or materialism (Comte 1851, 455–446).

Although Comte repeatedly explained his intention to construct a unified system of knowledge, he was hardly understood, not only because of his lack of clearness, but also because of his tendency to use the terms in the multiple contexts. This tendency caused the misunderstanding, and aroused the antagonism even in some of his disciples, especially in Émile Littré.

3. Émile Littré’s Criticism toward the Subjective Method

Famous for the *Dictionnaire de la langue française*, Émile Littré was an enthusiastic supporter of positivism. As a brilliant student at the Louis-le-Grand, he mastered ancient languages, and later translated Hippocrates from Greek into French (Littré 1839–1861); as an experienced medical practitioner, he issued the new medical journal called the *Expérience* with Jean Eugène Dezeimeris to promote medicine with a “scientific spirit” (Hamburger 1988, 55–56); as a scholarly journalist, he wrote an article about John Herschel’s *Preliminary Discourse on the Study of Natural Philosophy* (Littré 1873, 44–54); a polymath

from the humanities to the sciences, he was charmed by the positive philosophy.

However, Littré completely broke with Comte, especially with regard to the role of the subjective method. While Littré generally kept on admiring the *Cours de philosophie positive* throughout his life, he was quite skeptical about the *Système de politique positive* from the very beginning. For example, when he listened to Comte reading some chapters of the *Système de politique positive* for the first time, he remained “unmoved” (Littré 1863, 527–528). Above all, he could not understand why Comte had to exchange the objective method for the subjective method. Surprisingly, he devoted a whole chapter in the *Auguste Comte et la philosophie positive* to the criticism of the subjective method. It can be admitted that Littré wrote this book to remove what seemed to him the crucial errors from the life and works of Auguste Comte.

Why did Comte replace the objective method with the subjective method? Littré believed that one of the principal reasons was not philosophical, but psychological. More precisely, he insisted that Comte’s conversion coincided with a serious nervous disease (Littré 1863, 580). Therefore, according to Littré, it was because of the mental disorder that Comte committed a basic mistake by confusing the subjective method with the deductive method. He explains the difference between them as follows:

In the subjective method, the point of departure is an idea of the mind, which postulates, *a priori*, as they say, a certain metaphysical principle from which it deduces; in the deductive method, the point of departure is a result of experience, given either by the intuition such as in the mathematical axioms, or by the generalization of the induction such as in the principle of the gravitation. [...] In the subjective method, the consequences are as

metaphysical as the point of departure. They need only satisfy the condition of being logical. They neither find nor require the *a posteriori* confirmations of the experience; hence they extend without limit. In the deductive method, the consequences are worthy only after experimental verifications; the deduction indicates, the experience verifies. (Littré 1863, 532)

Therefore, Littré considered the subjective method as a way of reasoning without using the experience. In other words, it allowed the mind to freely invent any principle as a point of departure of logical inferences. For Littré, while the deductive method could be used in sciences such as mathematics and astronomy, the subjective method was incompatible with any kind of the positive sciences.

However, there remains some questions about Littré's severe criticism toward Comte. Although Comte explained his aim of using the subjective method, why couldn't Littré understand it? This question can be answered by clarifying three tacit disagreements between them: (1) that, while Comte tended to use the concepts of objective/subjective in the plural contexts, Littré always used them in the specific senses; (2) that Littré had ideas different from Comte about the nature of positive philosophy; (3) that Littré regarded objectivity as a scientific norm, a concept that stands contrary to subjectivity.

First, it should be noted that Littré narrowly defined objective/subjective in relation to world/mind, and used them in these senses consistently. For example, when Littré revised the *Dictionnaire de médecine* of a French physiologist P.-H. Nysten, he infused it with the mind of positive philosophy (Littré 1863, 185). Moreover, although it is a medical technical dictionary, he newly added to it some entries, such as *positif*, *sociologie*, and *objectif/subjectif* (Nysten 1855). According to him, *objectif* (objective) meant what has a relation to the

external world, and *subjectif* (subjective) signified what comes from the human mind without mingling any experience. Generally speaking, the same is true for Littré's *Dictionnaire de la langue française* (s.v. "objectif" and "subjectif"). Although Comte also equated objective/subjective with world/mind, Littré tended to attribute negative connotation to the concept of subjective, as shown below.

Second, it is also noteworthy that Littré made an original interpretation of the *Cours de philosophie positive*, which prevented him from understanding Comte's subjective method. While each of the six fundamental sciences was still separated for Comte, and therefore needed to be unified into a complete system, Littré considered that the positive philosophy was already completed. Significantly, Littré defined the concept of philosophy as a *conception du monde* (conception of the world). According to him, every philosophy represented its own conception of the world (Littré 1866, 11–12). In addition, the positive conception of the world consisted of all the positive sciences, which covered all kinds of natural phenomena (Littré 1866, 15–16). Metaphorically speaking, a conception of the world can be conceived just like a jigsaw puzzle: each piece of jigsaw puzzle (each kind of natural phenomena) forms a part of the whole (the world). Therefore, Littré considered that it already represented the entire world, and it was not necessary for him to unify each of the positive sciences.

Third, if objectivity was conceived as "the suppression of some aspect of the self," then Littré kept the idea in mind. That is to say, he always considered what is subjective as one of the greatest obstacles to the science. When discussing the relation between the subject and the object in the positive philosophy, he claimed that the role of the self had to be restricted to purely logical functions.

[I]n the positive philosophy, a purely logical role is attributed to the subjective. There, the subjective or the intelligence (they are identical) searches only what is, without bringing it anything other than the logical or formal conditions (they are identical) which is inherent in it and under which the intelligence knows. (Littré 1863, 670)

Moreover, Littré's notion of logic is worthy of special attention. Contrary to John Stuart Mill, he considered that observing the logical functions was not the precondition of truth. Interestingly enough, he claimed that the logic provided criteria of truth as long as the experience kept on verifying it.

Here, quite contrary to the belief that the experience needs the logic, I believe that it is the logic which needs the experience. If the scientific truths are true only logically, they would not escape from the circle of the simple hypotheses; but it is when the experience is supplied to them that the logical theory of the induction is built. The positive philosophy never depends on the logic. On the contrary, the logic depends on the positive philosophy. (Littré 1866, 36)

Here, Littré clearly expressed an externalist attitude. In general, externalism signifies an epistemological attitude that, even if a proposition is not sufficiently justified, it can be considered justified as long as it is *effectively* reliable. In other words, the reliability of the logic depends on the fact that the sciences have been successful so far. Similarly, he subordinated the subject to the object, that is to say, the functions of the mind (including the logical functions) should be explained by the scientific theories of the world.

In short, Littré regarded the analysis of the self as subsidiary in the positive

philosophy, because the self had to be integrated into the conception of the world, which was represented by the positive philosophy, or the mind had to be naturalized. Moreover, he firmly claimed that the activity of the self had to be limited to the purely logical roles, because the arbitrariness of the self possibly led to the errors of the subjective method. Thus, it can be admitted that this idea clearly showed the idea of objectivity as an ideal of scientific attitude.

4. Conclusion

In sum, this paper confirms that there is a serious disagreement about the concepts of objective/subjective between Auguste Comte and Émile Littré. This conflict can be understood by the three reasons: (1) since Comte creatively used the concepts in order to adapt them to his Positivism, they were unintelligible for Littré who understood them unambiguously; (2) Littré could not understand Comte's intention to unify each of the six fundamental sciences by means of the subjective method, because the positive philosophy was a conception of the world and there was no need to newly unify them as long as they already represented the system of the entire world; (3) Littré discredited the subjectivity as mere obstacle to the science, and suggested restricting it to the purely logical functions essential to the scientific inferences, indicating that he had the ideal of scientific objectivity in Daston and Galison's sense. In other words, it can be said that Littré cannot understand Comte's subjective method, chiefly because he kept in mind the notion of objectivity contrary to subjectivity. However, there still remains questions. Where did Littré's ideal of objectivity come from? To shed light on the emergence of objectivity as a scientific norm in the nineteenth-century France, it will be necessary

to further study the life and works of Émile Littré. At least, this paper shows that it was not Comte but Littré that introduced scientific objectivity into Positivism.

References

- Azouvi, François and Dominique Bourel (eds.). *De Königsberg à Paris: La réception de Kant en France (1788–1804)*. Paris: Vrin, 1991.
- Bernard, Claude. *Introduction à l'étude de la médecine expérimentale*. Paris: Bail- lière, 1865.
- Comte, Auguste. *Cours de philosophie positive*, vol. 6. Paris: Bachelier, 1842.
- Comte, Auguste. *Discours sur l'esprit positif*. Paris: Carilian-Gœury et V^{or} Dal- mont, 1844a.
- Comte, Auguste. *Traité d'astronomie populaire*. Paris: Carilian-Gœury et V^{or} Dalmont, 1844b.
- Comte, Auguste. *Système de politique positive*, vol. 1. Paris: Carilian-Gœury et V^{or} Dalmont, 1851.
- Comte, Auguste. *Catéchisme positiviste*. Edition Apostolique. Paris: Apostolat Positiviste, 1891.
- Daston, Lorraine, and Peter Galison. *Objectivity*. 2nd ed. New York: Zone Books, 2010.
- Durkheim, Émile. *Les Règles de la méthode sociologique*. Paris: Félix Alcan, 1895.
- Hamburger, Jean. *Monsieur Littré*. Paris: Flammarion, 1988.
- Hippocrate. *Œuvres complètes*. Translated by Émile Littré. 10 vols. Paris: Bail- lière, 1839–1861.

- Karskens, Machiel. "The Development of the Opposition Subjective Versus Objective in the 18th Century." *Archiv für Begriffsgeschichte* 35 (1992): 214–56.
- Laffite, Pierre (ed.). "Matériaux pour servir à la biographie d'Auguste Comte: Correspondance d'Auguste Comte et Gustave d'Eichthal." *Revue occidentale philosophique sociales et politiques* 13 (1896): 186–276, 345–388.
- Littré, Émile. *Auguste Comte et la philosophie positive*. Paris: Hachette, 1863.
- Littré, Émile. *Auguste Comte et Stuart Mill*. Paris: Baillière, 1866.
- Littré, Émile. *La science au point de vue philosophique*. Paris: Didier, 1873.
- Nysten, Pierre-Hubert. *Dictionnaire de médecine, de chirurgie, de pharmacie, des sciences accessoires et de l'art vétérinaire*. 2 vols. Edited by Émile Littré and Charles Robin. 10th ed. Paris: Baillière, 1855.
- Pickering, Mary. *Auguste Comte: An Intellectual Biography*, 3 vols. Cambridge: Cambridge University Press, 1993–2009.
- Villers, Charles. *Philosophie de Kant, ou Principes fondamentaux de la philosophie transcendente*. Metz: Collingnon, 1801.