

THE THEATRE OF THE ATHLETIC NUDE: THE TEACHING AND STUDY OF ANATOMY AT THE ÉCOLE DES BEAUX- ARTS, PARIS, 1873-1940

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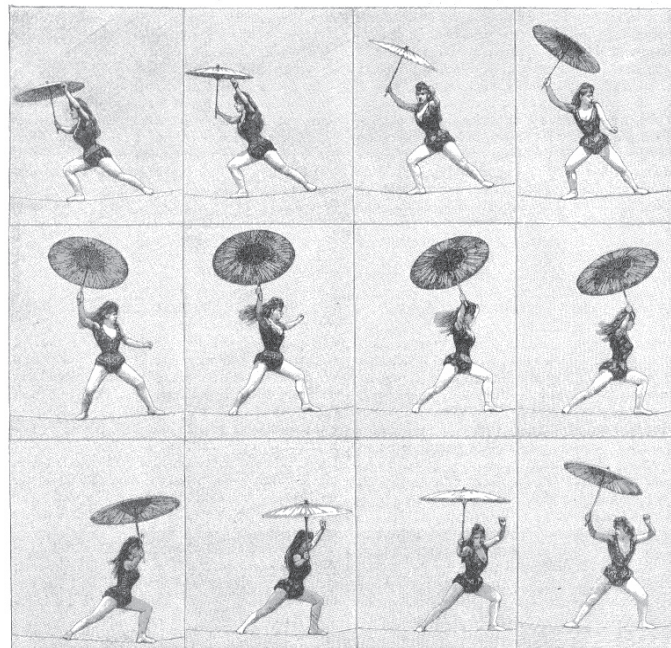


Fig. 1. — Spécimen en fac-similé d'une épreuve obtenue par les procédés photochronographiques de M. A. Londe.
(Lire la série des images de gauche à droite par la rangée supérieure et ainsi de suite.)

Fig. 1. Chronophotographic study of a “danseur de la corde” conducted by Richer and Londe, from Londe, “Photochronographie” (1893), p. 372. Image courtesy of Conservatoire des Arts et Métiers (C.N.A.M.), Conseratoire numérique, <<http://cnum.cnam.fr>>.

MEDICAL JOURNALIST AUGUSTE CABANÈS noted in his 1899 profile of neurophysiologist and part-time artist Paul Richer that:

[i]t is undoubtable that the Ancients acquired their knowledge of the *nude* in the *gymnasia*, [or] through attendance at Olympic Games. Today, according to Dr Richer, one must seek one's models in fairgrounds or circuses or better yet in athletic Societies, the forms of these athletes being nearly as perfect as those of the ‘profession of Antoninus’ [gladiators] to interpret such [ideal] *models* of the studio (Cabanès 1899, 131; translation by author).

Richer agreed that while the Olympian “Apollo” may have become today’s modern “cyclist” or “clown”-acrobat (fig. 1, above)¹ and the strongman “Hercules” now “works’ at the fair in Trône,” there had nevertheless been a:

renaissance in exercises of the body . . . It suffices to attend Football matches to discover, amongst these young men, which of them are the savants of the future, plastic types destined to rival the ancients . . . I salute the return of our youth to these antique traditions (Richer 1897, 36-7; Mathon, Poivert, Monnoni et al 1997, esp. 152-163).

The 1897 publication quoted above was but one in a series of polemics authored by Richer, Henry Meige and Mathias Duval between 1873 and 1940 in an attempt to consolidate within Paris’ École Nationale Supérieure des Beaux-Arts (E.N.S.B.A.) the ideal of aesthetics as based on a dynamic but essentially manageable model of the human body in movement. In these discourses, the theatrical spectatorship of the athletic nude was marshalled in the service of medicine, aesthetics, and social and racial health. As Duval opined:

for the artists of antiquity the knowledge of the plastic forms [of the body] was like a maternal language which they spoke apparently without learning it, because they studied it at every instant; today that knowledge is no longer like a dead language, of which one painfully learns through grammar and the reading of its good authors; [because] in this case, the grammar is [modern] anatomy; the good authors are the masters of Greek sculpture (Duval and Bical 1890, 8).

Closely connected with the new sciences of physiology and neurology, Richer, Meige and Duval wished to restore to academic art its progressive, modern quality by allying it not simply with traditional anatomical dissection as it had developed since the Renaissance, but also to those novel medical disciplines whose focus was the body in action. The task was to revive this “maternal language” of the performing body, found at the Greek Olympics or amongst the strongmen of the fair-ground, and to synthesise these theatrical forms with the latest discoveries in science and medicine. This would produce a distinctly modern, neo-Classical aesthetic.

The E.N.S.B.A. lecturers were not simply concerned with an art form, but with a culture of performance and spectatorship which would energise and improve the social body as a whole. Earlier neo-Classical scholars like Joachim Winckelmann and Gotthold Ephraim Lessing had extolled stasis, stability and the *absence* of intense psycho-muscular actions in the nude as the condition of its beauty. Lessing (a dramatist himself) insisted that while *actions* made up the proper subjects of theatre and prose, then the *inactive* body was the proper subject of visual representation.² Moreover, for Winckelmann and his followers, the freedom of the immobile heroic nude from neuromuscular excitation and emotion reflected the political freedom and intellectual plenitude enjoyed by the citizens of the ancient Athenian republic. Richer and his associates reinterpreted these ideals in light of the new knowledge provided by the nineteenth century sciences of physiology and modern technologies such as stop-motion photography. The E.N.S.B.A. lecturers connected the highest forms of aesthetics with the liberated plenitude of vigorous muscular action and with those transitory performative forms manifest within the moving body—a dynamic physical “grammar,” in Duval’s words above—which here acted as signifiers of physical health, beauty, mimetic truth, and a return to the values of the ancients. Only strong, enlightened and disease-free French Republicans could perform such bodily actions, and these now re-enacted, idealised theatrical manifestations provided the ideal subjects for the progressive realist academic art proposed by Richer and his associates.

The visual and plastic arts were to become a manifestation of this dynamic principle of life and social

health, whilst also mastering and channelling these forces into a rational, iconographic form conducive to social and political health. Representations of this kind would act as physical and intellectual models to which the youth of France would aspire. The modern sportsman was not just an ethically neutral, empty performing body. In his practical knowledge and employment of scientific and physiological principles, he was “the savant of the future.” Such ideal forms were to be found not only in the live performance of sports like those being promoted from the 1880s onwards as part of the physical hygiene movement, but also in the static representations constructed according to Richer’s newly articulated aesthetico-physiological-rules, which captured the surging dynamism of the body in their iconic form. Performance, in this sense, was to be distributed throughout society as a whole, as well as throughout the arts, with the modern stadium acting as the theatrical locus for the teaching and promulgation of healthy embodied aesthetics.

Before I outline Richer’s ideas in more detail below, it is perhaps helpful to situate my argument more explicitly within Performance Studies proper. In the terms developed by Judith Butler, Richer and his peers may be said to have striven to represent athletic performance by reducing it to an essentially iconographic, scientific canon in which femininity and overt performativity were contained (Marshall 1997). Rather than seeing performance as *actively constitutive* of the body and its readings (as Butler’s theorisation of the performative would imply), these practitioners were trying to sketch a model in which all performance—and indeed all art—was *reflective* of an essentially invariant, racial, sexed body.³ The teaching in arts, athletics and anatomy at the Paris School of Fine Arts also offers an example of the kind of disciplinary fusion and exchange which characterised European modernism as a whole.

A full discussion of the methodological implications of here reading both art-history and the history of physiology through the lens of theatre and performance is beyond the scope of this essay. It is however worth noting that this study follows in that scholarly tradition which arose in opposition to Michael Fried’s influential art-historical writings of 1967-80. Fried argued that post-Enlightenment culture as a whole—and high modernist painting in particular—was characterised by a rigorously “optical” hierarchy, which relegated all other qualities of the image to the margins of cultural life. Any contamination of this optical formalism by temporal features, by kinaesthesia, and other factors, was fundamentally inimical to modernism, and so constituted a form of degraded “theatricalism” such as one found in the emerging genre of postmodern performance art (Fried 1998, Marsh 1993). “Theatre” was constructed negatively by Fried as a sign of formal, disciplinary and cultural indeterminacy and multiplicity.

Recent scholarship however has tended to see such formalistic exchanges and performative indeterminacy as a key feature of modernist cultural practice, especially within the avant-garde. Performative multi-media assemblages underwrote many modernist total-art projects, varying from Wagnerian opera (where set, painting, sound, score and libretto were fused into a *gesamtkunstwerk*, manifesting throughout the space a multilayered Romantic narrative) to Futurism (which, in its ideal form, would bring together noise-as-music, speed, mechanisation, painterly form, living sculpture, violence, the voice and concrete poetry as part of a chaotically totalising theatrical event; a dramatico-sculptural “*Merzbau*” in the terms of Kurt Schwitters) (Wagner 1970, Apollonio 1973, Muller-Alsbach and Stahlhut 2004, Marshall 2007a).

When dealing with modernist cultural practice and performance, it is then perhaps less helpful for the scholar to apply Fried’s dialectic of sharp formalistic distinction versus degraded theatrical mixing, than to consider the history of visual arts as a kind of theatron within which multiple aesthetic forms, types of knowledge and modes of description tended to coalesce around the living, performing subject. Indeed, Richer’s contemporary, Aby Warburg, argued along precisely these lines, contending

that it was the presence and tension of Dionysian movement and dancerly ritual within the painterly or sculptural figure that had animated and driven aesthetic development from the time of the ancient maenads through to the performance of ornate Renaissance festivals and intermezzi.⁴ Leaving aside Warburg's idea of an animating "pathos formula," one can agree that throughout much of art history, the performing body has acted as a foundational principle for aesthetic theory, as the primary subject of representation, and as the most vexing challenge to such formalised codes as were rendered on the stage of E.N.S.B.A.'s lecture theatre—as well as upon the various stages of modernism and its discontents. In this sense, the model proposed by Richer and his peers may be seen as a rationalist, republican alternative to such other projects for the aesthetico-social reform of the body found in: avant-garde dramaturgy, Modernist visual arts (the strictly optical, flat indeterminacy of the body in Impressionism), the dancing "mass ornaments" and neo-Classical "body armour" of fascist aesthetics, and more eccentric formulations such as Jean Richepin's promotion of tango to generate the military preparedness, health and vigour of ancient Greece within the modern French nation.⁵

The *fin de siècle* was indeed a period of considerable change at E.N.S.B.A. itself. Dissection and anatomy had been offered at the École since the eighteenth century. Pierre-Nicolas Gerdy proposed in the 1820s that anatomical life drawing should be based upon knowledge of the moving nude as well as the dissected corpse (Bracquias 1857, 69-92; Callan 1997, 23-60). His influence was minimised by machinations within the institution and Gerdy's uncompromising anti-royalist stance during the period of the July Monarchy (1831-48). It was not until the time of the Third Republic (1870-1940) and the appointment of the progressive if not radical figure of Mathias Duval that these reforms began to be instituted. Duval was a doctor, scientist and embryologist whose lectures on the Evolutionary theories of Darwin and the Englishman's French predecessors (Jean-Baptiste Lamarck, Georges Buffon and Étienne Geoffroy Saint-Hilaire) were widely promulgated within the Republican, anti-clerical scientific community of France (Retterer 1907; Hervé 1907, 69-74).⁶ Duval occupied the professorial chair of artistic anatomy at E.N.S.B.A., 1873-1903, and was succeeded by Richer, who was himself replaced by Henry Meige in 1922. Meige occupied the position until 1940. Richer and Meige were both students of the famous physician, Jean-Martin Charcot, who had been appointed to France's first professorial chair in neuropathology in 1882. Charcot taught Meige and Richer, and acted as their patron from 1876 until the neurologist's death in 1893. A doctor by training, Richer employed his skills as a draftsman for the documentation of Charcot's practice and Richer's own clinical observations, as well as exhibiting various aesthetic works in Paris' Salons.⁷

Enrolment at the École permitted students to attend any of the Medical Faculty's lectures held throughout Paris. Charcot's in particular tended to draw a wide artistic and lay audience (Marshall 2002, 2003 and 2008a). Those shown in attendance in André Brouillet's 1887 painting (fig. 2, below) comprised a veritable who's who of senior savants and young men who were to become legendary in the fields of neurology, psychiatry and physiology, including Duval (fourth from the right, upper register) and Richer (seated at the table centre, sketching the lesson). Charcot's lectures were generally held within the "amphithéâtre" of the Salpêtrière Women's Hospice, where Charcot was head of the infirmary and of the clinique des maladies du système nerveux [department of neuropathology], 1872-93 (Goetz, Bonduelle and Gelfand 1995). This custom-built building was not a true amphitheatre, but a rectangular space which recalled the new Naturalist venues beginning to appear in Paris. Charcot's presentations routinely attracted one hundred or more spectators and were widely reported in the press (see, for example, Guérin 1887 and Clarétie 1881a and 1881b).

In a lecture demonstration of 1888, Charcot observed that:



Fig. 2. André Brouillet, *Une leçon clinique à la Salpêtrière* [A Clinical Lesson at the Salpêtrière] (1887). Image courtesy of the Freud Museum, Vienna.

[i]n reality . . . we . . . doctors, must know *the nude* as well, better even than painters know it. A defect in drawing by the painter and the sculptor is doubtless serious from the point of view of art, but overall from a practical perspective it is not of any major consequence. But what would you say if it were a physician or a surgeon, who mistook . . . a normal bulge for a pathological deformation or vice versa? . . . this digression will perhaps be enough to bring out once again the great necessity for the physician as for the surgeon to attach a greater importance to the medicosurgical study of the NUDE. Soon . . . we will be in possession of a grand work adorned with admirable plates, made after nature, in which you will find this part of our science dealt with in all the details of which it is comprised. It is to Dr Richer, the head of my laboratory and more than once my collaborator, that this monument will be due, and in which we will see, for the great profit of all, art and science marching together, hand in hand (Charcot *Oeuvres complètes* vol 13, 20-22).

The “great work” which Charcot was referring to was *Les démoniaques dans l’art* [*The Demoniacs in Art*], published by the pair in 1886, which was followed by *Les difformes et les malades dans l’art* [*The Deformed and the Ill in Art*] in 1889. Both texts traced those characteristic physical signs of various illnesses which appeared throughout the ages in great art works. *Les démoniaques* dealt principally with hysterical performance (the choreography of seizure, and the *mise en scène* of hallucination and altered-consciousness, as diagnostic criteria; see Marshall 2008b), while *Les difformes* was a more generalist text. Such art composed “after nature” was seen to represent an insipient clinical modernity in its transparent, descriptive accuracy. In Richer’s words, a “love of truth” and “exact imitation” formed the basis for both science and aesthetics (1895, 8-9). Even in the face of such techniques of analysis, however, more overtly performative disorders such as hysteria remained problematic.

Richer documented the symptomatic poses of the hysterical fit in a series of sketches made in the wards, 1874-85 (fig. 3, below). His analysis of the syndrome revealed it to constitute a veritable “Proteus’ . . .

composed of phenomena which are bizarre, incoherent, always changing” and which were, “as a result,” difficult to subject “to methodical investigation” (1881, vii). As throughout their practice though, Charcot and Richer remained convinced that even such indeterminate, neurological performances could be systematised, with Richer proclaiming that while the actual number of positions within the hysterical fit vexed classification, the sequential and temporal aspect of hysterical choreography was possible to describe. The order in which different kinds of poses arose during seizure was consistent, causing Richer to posit that his hysterical subjects “resemble those music boxes which possess several different airs, but are disposed” to replay them “in an invariable order” in performance (Richer 1881, 158). Hysteria was in this sense an explicitly theatrical illness, its temporal (if not physical) choreography being a determinate diagnostic characteristic of disease manifestation best identified through the spectatorship of patient performance by the trained observer.

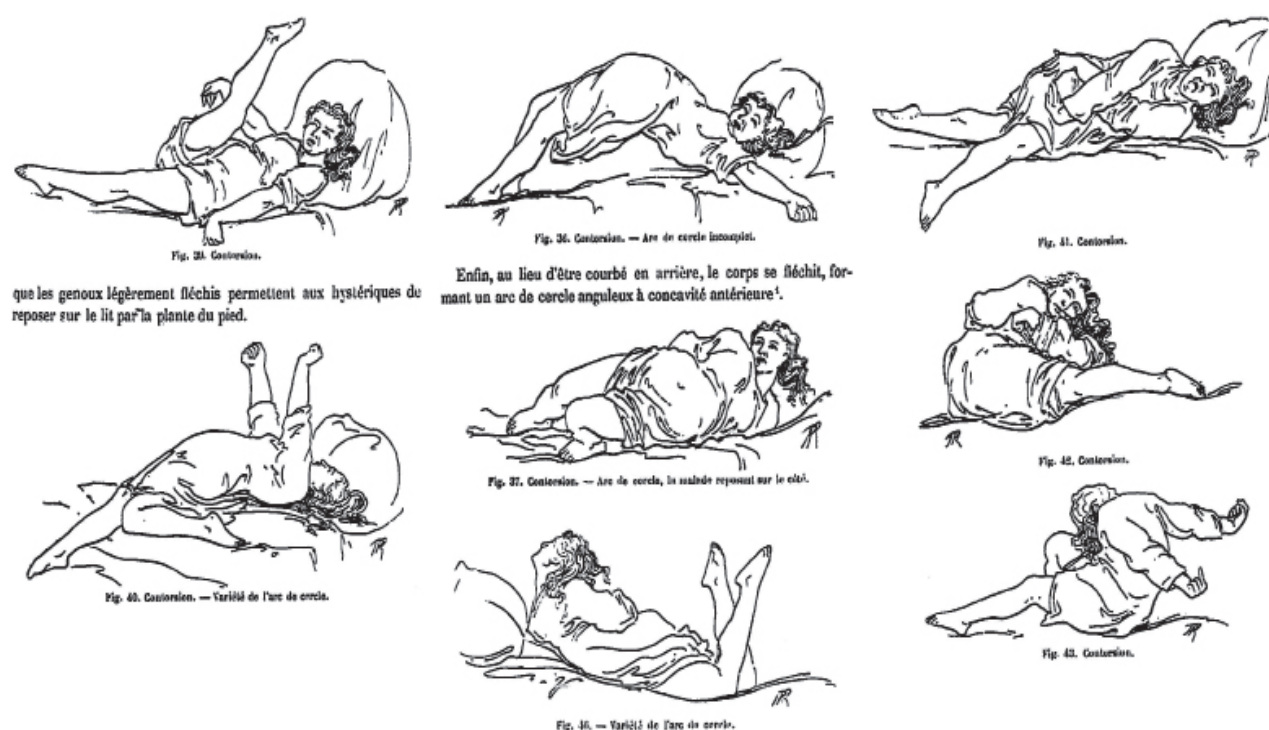


Fig. 3. Poses of the hysterical fit (“attitudes illogiques” from the third, athletic stage of “clownisme”), from Richer, *Études cliniques* (1881). Images courtesy of the Harvard Medical Library.

In his work as an anthropologist and racial theorist from the 1890s, Richer continued to chart the troublesome variability of the female human form as he ventured a canon of proper, healthy bodily proportions specific to different races and diseases. For the ancient Greek “heroic” canon, this translated to a visibly muscled, dynamic male approximately eight heads in height (Richer 1897a, 1919, and 1889-1929). Of woman however, Richer more despondently concluded that while “formed from the same organs, the same tissues . . . same bones, same muscles, same [blood] vessels and same nerves,” she was “nevertheless possessed of forms which are infinitely more varied” than those of man—a variability he attributed to the “almost fluid” character of women’s adipose tissue (1889-1929, vol. 2, 97). Even when not performing, the female form seemed disturbingly liable to transformation in Richer’s eyes. The physician’s ideal performance did not therefore include the female body, except by way of contrast to the male. It was rather the performance of the muscular, male body which Richer identified as the site upon which his modern, scientific, neo-Classical aesthetic would be based (see also Callan 2003).

Charcot himself had principally been interested in describing the pathological body in performance (tics, seizure, gait, coordination) in order to further the cause of neurology and its related disciplines such as physiology. In this project he employed the authority of the great artists to bolster the veracity of his own diagnostic approach of visual, clinical analysis (see, especially, Meige 1898). *Les démoniaques* for example included a sketch of a convulsing woman attributed to Peter Paul Rubens, which Charcot described as “the most faithful photograph of the contortions of a hysterical attack” (*Oeuvres* vol. 9, 296; Richer 1885, 943-4; Charcot and Richer 1984; and Magloire-Bourneville and Régnaud 1875-77 vol. 1, plate XI), while in *Les difformes*, the authors retrospectively identified the neurological condition of glossolabial-hemispasm in a Medieval grotesque from the walls of Venice’s Santa Maria Formosa (fig. 4, below). The fact that this transitory deformation was confined to one side of its face, with the glottis, tongue, corner of the mouth, nostril, orbit and brow all affected as part of a single, unified movement meant that—in the opinion of Charcot and Richer—the sculptor must have modelled the piece on a living example of such an individual. The performance represented was “so grotesque and so hideous” that it was “in no way the result of a simple artistic fantasy” (Charcot and Richer 1972, 1). The depiction of such neuromuscular complexity was read as a sign of unambiguous realism and as a precedent for the modern clinical observation of the amphitheatre which Charcot and Richer extolled.



Fig. 4. Richer’s sketches of glossolabial hemispasm, from Charcot and Richer, *Les difformes* (1889), pp. 2-4. Courtesy of Harvard.

It was however Duval, Richer and Meige who transferred this approach to the observation of the fitting, trembling or otherwise mobile patient into a more overtly aesthetic realm; one which was more concerned with the depiction of normal, healthy bodies than with diseased ones.⁸ When Charcot died in 1893, Richer was at something of a loss. Although widely respected, like most of Charcot’s students, he had depended heavily upon Charcot’s institutional support to advance his career. Additionally, much of Charcot’s work—especially the neurologist’s findings on hysteria and hypnosis, with

which Richer had been closely allied—fell into disrepute during the 1890s (Micale 1993). For ten years, Richer busied himself at the Salpêtrière, working with Albert Londe on the chronophotographic analysis of movement in various athletic subjects (Londe 1893; see fig. 5, below). Richer and Londe built on the pioneering work of Collège de France physiologist Étienne-Jules Marey in employing chronophotography (calibrated stop-motion capture) and other graphic recording devices (sphygmographs, the tracing of steps, and the charting of various muscular forces—christened by Marey “la méthode graphique”) in order to break down movement into its component elements (see Marey 2002, 1878; Braun 1994; Mannoni 2000, 303-362). Together with his collaborator Georges Demeny (founder of the Cercle de gymnastique rationnelle in 1880), Marey helped to scientise athletics training at the Joinville national École Militaire de Gymnastique et d’Escrime [Military School of Gymnastics and Fencing] (see also Arnaud et al 1981, 187-221 & 247-290). Richer grew increasingly insistent in his publications during this period that the study and teaching of art had to be reformed in light of these new discoveries in the physiology of movement. Meige proved a worthy second to Richer in this project, switching allegiance from Charcot as the pair moved to consolidate the role of medical knowledge within the institutional discourse and practice of E.N.S.B.A. itself.⁹

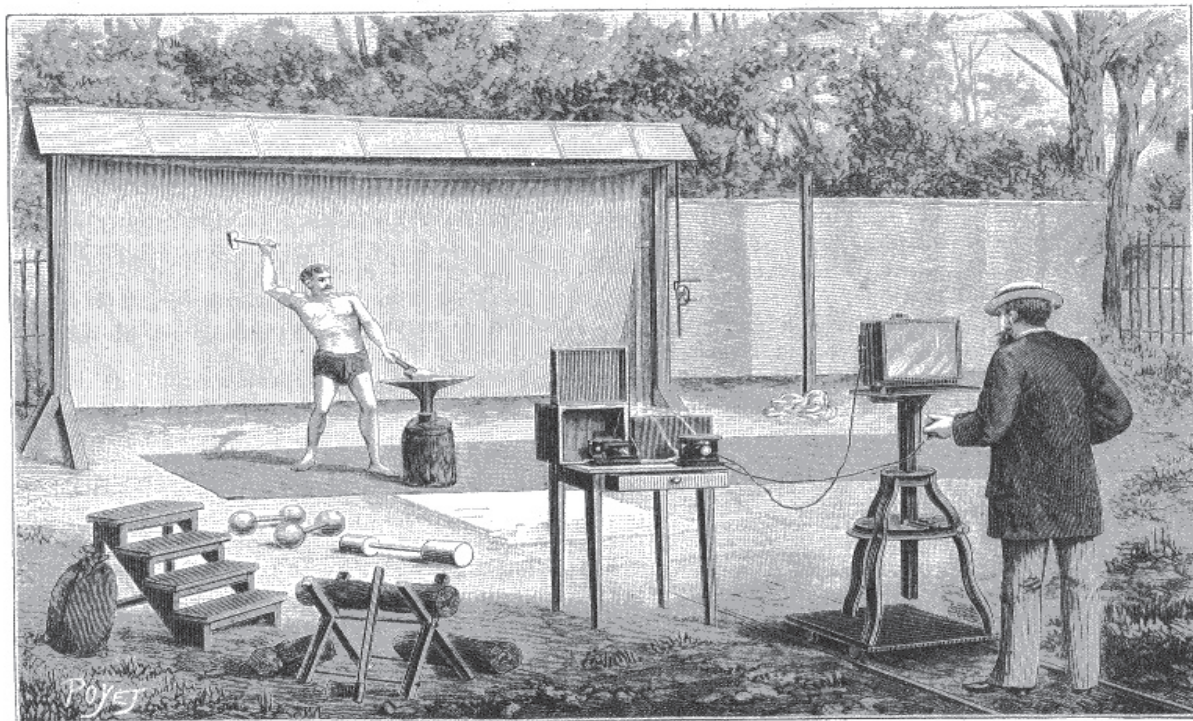


Fig. 4. — Le nouveau laboratoire photochronographique en plein air de la Salpêtrière.

Fig. 5. Londe’s chronophotographic laboratory in the Salpêtrière gardens, from Londe, “Photochronographie” (1893), p. 373. Courtesy of C.N.A.M..

Richer and his colleagues insisted that true anatomical knowledge—for both the physician and the artist—could only be derived by uniting the knowledge of structural, internal anatomy with that of the dynamic, muscular anatomy of the nude; or in the Richer’s terms “the *anatomy of forms*” with “the *physiology of forms*” (Richer 1895, 15). In Duval’s introduction to a publication of the anatomical drawings on Leonardo da Vinci, Theodore Géricault and others, he similarly argued that the great nudes of ancient Greece were based on a profound knowledge of the moving body, generated by spectatorship at the Olympic games and similar events:

It is this kind of anatomy [conducted] on the living being which was brought down

from the artists of antiquity, initiated into the secrets of forms by the incessant contemplation of the living plasticity of the gymnasium (Duval and Bical 1890, 3).

As Meige observed: “I do not think that there exists a greater pleasure of the mind than the search for scientific truth within the spectacle of beauty” and it was this spectacle which enabled the flowering of the arts, of myology (study of musculature) and athletics amongst the ancients (1923, 5).

In keeping with this principle of athletic spectatorship, one journalist noted that Duval’s own teaching was based:

upon the actual source of the movements themselves, amongst the muscle groups, applying himself to the reasons for the modelled shape and postures. It is then that, aided in turn by the cadaver and the living model, dissecting the muscle with the scalpel, that he . . . comes to enable the artist [in Duval’s words] “to analyse through the skin, as if through a transparent veil”¹⁰

In medical research such as that conducted by Charcot, this was known as the anatomoclinical approach, whereby such physical characteristics as the nature of the patient’s gait, or the kinds of poses which were typical of the patient’s seizure, were mapped onto specific tissues and their healthy or necrotised condition. Within the amphithéâtre at the Salpêtrière and that at the École, this meant that living subjects were presented on the stage alongside slides of dissections, écorchés (sculptures of flayed subjects), illustrations of figures in movement, and other materials, which were related together in a form of deductive dissection. Charcot had indeed excelled at such a form of performative, multimedia description, while Richer and Meige also used casts, slides, etchings, cinematic films and photographs (Starr et al 1926; Vurpas 1934; Meige 1934 ; and Marshall 2002, 2003 and 2008a). As one of the E.N.S.B.A. assistant demonstrators observed, under Meige and his predecessors:

[o]ne learnt the anatomy of forms not only from skeletons, écorchés and the cadaver, not only from the nude and immobile model, but from the nude in movement . . . To present this in all its force and plenitude he opened the door of the amphitheatre to celebrated athletes, to those [gymnastic] artists of the music-hall and the circus, to dancers and to mimes. When the atelier seemed too cramped, we went to the Stadium at Joinville to study those sporting gestures so favourable to the physiological knowledge of human movement (Bellugue 1941, 372-4).

Richer was indeed a “Constant presence at the meetings of the Racing Club” of Paris and himself produced “a series of statuettes of athletes” which “realised a scientific and artistic synthesis of running” and which were exhibited at the 1900 International Exposition, held in conjunction with the first International Congress of Physical Education and Sport.¹¹ It was this study of the living “exterior forms of the human body” which had been neglected by physiologists prior to Charcot, Duval and their successors, and which Richer advised his students to become acquainted with by attending contemporary athletic performances (Richer 1903, 20).

Comparing those écorchés which had long been available to E.N.S.B.A. lecturers to those athletes which Richer and Meige had access to from the Racing Club and elsewhere, Charcot’s former students dismissed as irrevocably flawed the purely anatomical knowledge upon which the écorchés were based. “If . . . the écorché is presented to us as a lesson in form,” Richer observed: “we can say that it is incomplete and misleading” (Richer 1903, 4). Both Richer and Meige likened such representations to “galvanised cadavers,” Meige adding that: “[d]eath . . . profoundly alters exterior appearances” as well as the quality of the muscles (Richer 1903, 4; Meige 1923, 12-13 and 1926, 1-7). Within these

écorchés, the muscle tone was imperfect, with the muscles of these statues exhibiting the same flaccid state as the dissected corpses on which they were modelled. The engorged and restricted blood vessels one would see in a living subject were absent, and the way in which the muscles differentially bulged and compressed, was not depicted. Richer explained that

the volume of the diverse parts of our body are not constantly the same, it [the body] is, on the contrary, in a perpetual state of instability. That is to say that it changes from moment to moment, with our stances, with our actions, our feelings, our emotions, even our thoughts. One of the features of life is the incessant changes in the volume of the limbs and as a result in their form. From this it follows that, in Nature, the form itself is variable, transitory and ever-changing (1897, 30).

In short, no living model had ever marched or danced the way they were depicted in these historic écorchés, and after 1873, such materials were used as examples of artistic errors, rather than as representations of realistically arranged bodily poses. There was an ineffable, musical or operatic quality to the mutual, harmonic interaction of organs in the living subject which could not be simply assimilated into anatomical dissection.



Fig. 6. Paul Richer, *Tres in una* (1913). Image courtesy of E.N.S.B.A..

As with the case of the female canon, Richer strove to limit and contain this dynamic variability such that it could be accurately described and represented in rational, scientific and aesthetic terms. For the female form, for example, Richer offered three separate, proportional models which were normative for different historical periods. This was represented in his 1913 sculpture: *Tres in una, ou L'idéal du nu féminin dans l'art selon les maîtres de la renaissance, les antiques et les modernes* [*Three In One, or The Ideal Feminine Nude In Art After the Masters of the Renaissance, the Ancients and the Moderns*] (fig. 6; see Richer 1890, 1919, 1889-1929 vols. 2 and 5; Meige 1914 [in Richer 1889-1929 vol. 5, 353-266] and Anon 1930-1936 vol. 5,7 5). Richer also distinguished between the relatively rare, idealised “heroic” canon found in Greek male statuary, versus the slightly shorter, normative stature of the modern Europe population.

Nevertheless, despite such efforts to concretise the living, anthropological subject via a sculptural canon, Richer likened the body to an ever-changing musical performance, in which

[i]t suffices to look at . . . [Nature] to see, in the same action, here a contracted muscle, here a distended muscle, and not long after a relaxed muscle . . . just like the variety of musical sounds produced by a symphony . . . which is the very expression movement (1907, 12).

He did however remain insistent that it was “the role of Art” to “fix” these plastic, symphonic forms of the body “at the moment which is appropriate,” capturing only “that which is truly produced, in Nature, under the vital influence” of the neurophysiological processes of the body itself (Richer 1897, 30). The function of art was therefore to capture, stabilise and control such vital, performative processes by confining aesthetic vision to that which was immanent within the idealised body alone. Such an embodied form was nevertheless only fully manifest in the living performance of the nude athletic subject, its full musicality revealed through such forms as chronophotography and sports (see Marshall 2007a).¹²

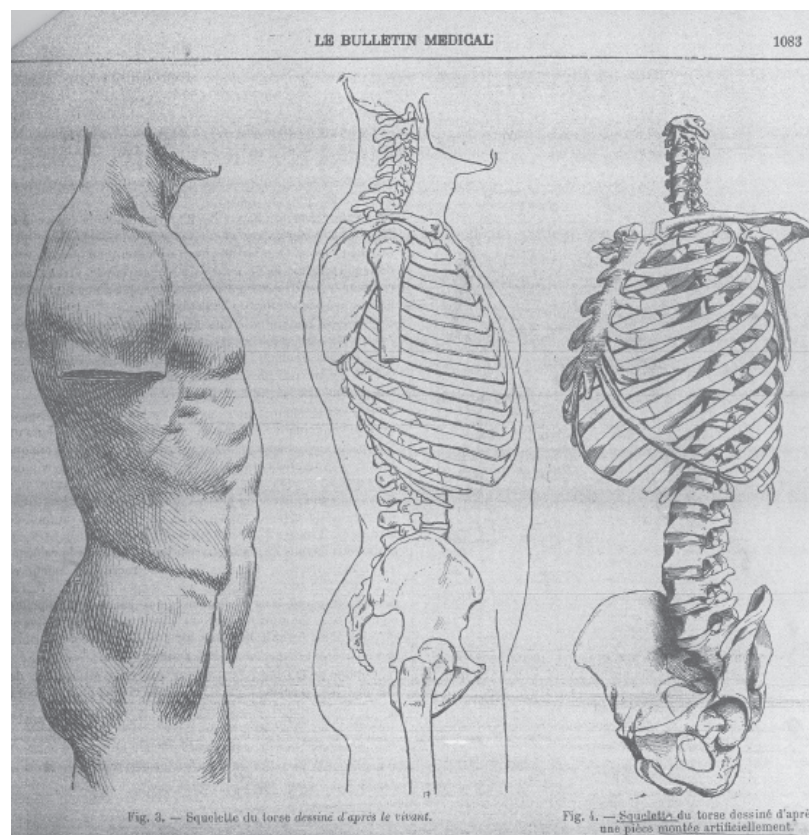


Fig. 7. Sketch from Richer’s 1st lesson for the 1908 course in anatomy; Richer, “L’anatomie vivante,” p. 1083. Courtesy of Harvard.

Richer’s systematic approach to teaching was designed to master this dialectic between the readily comprehensible, dissected figure, versus modern knowledge of the performative athletic body, by beginning with the study of the individual bones, before moving to a close examination of the whole skeleton in various poses. This rational, architectural armature was then compared with the living model in similar positions (fig. 7). Such a comparative analysis helped to establish the basic mechanis-

the muscles were attached. The different muscle groups and their dynamic interactions were then related through the presentation of illustrations accompanied by prepared dissections. Later lectures also covered art history, particularly focussing on Classical and Renaissance works. The critical series of lessons however were those in which the physiology of the body in movement itself was directly addressed through the presentation of active models and still images. Here, photography served as a particularly important analytic and demonstrative tool, its scientific character helping to unite aesthetics with a rationalised medical vision.

Through the use of chronophotography, the dynamic body was reduced to a series of clearly visible, distinct iconographic moments which could be scientifically, mathematically and aesthetically described using Marey's "méthode graphique." Projections of these photographs were employed in Richer's lectures, and reproductions appeared prominently within his published lessons. As Meige explained in his inaugural lecture at E.N.S.B.A.:

the multiplication of instantaneous images provided by cinematography . . . permits the decomposition of the most rapid movements, and if one interrupts their unfolding, one can, in an instant, study the characteristics of a moving form (1923, 22).

This technical and rhetorical description of performance in the lecture theatre functioned in two ways. Firstly, it reduced the dynamism of movement to a series of scientific, iconographic forms which could be readily characterised and manipulated. The more plastic, Dionysian possibilities of neurophysiological performance—such as those found in hysteria and the feminine form—were largely elided or constrained. Although Richer was insistent that artists should be familiar with all the characteristics of illness so as to represent Nature in its totality, he nevertheless echoed Winckelmann in warning his students that "movements imprinted with an ambience of melodrama mar the most meritorious art works" (Richer 1907, 10). The aesthetic which he and his peers proposed was restrained, rationalised and scientifically 'transparent.' In Butler's terms, the possibility for iterative performativity to highlight an instability within the identities named by such physical acts (the fitting hysteric, the running athlete, the working Frenchman) was disavowed.

Additionally, the staged quality of the performances which Richer and his peers presented was excised and denied. As Georges Didi-Huberman observed of Charcot's lectures, Richer's approach constituted "a spectacle" ostensibly "without a *mise en scène*" (Didi-Huberman 2003, 23), its truth said to be immanent rather than constructed. Clinical accuracy and healthy athleticism were best assured by an unadorned performance of the inherent physical traits of the body. The scientists photographed the body, nude, in front of an unembellished background such as the black screens employed by Marey or the neutral wooden stage which Londe had constructed at the Salpêtrière (fig. 5, above, fig. 8 below; see Londe 1893), so that the dramaturgical setting receded into the margins. Although posed and arranged, Richer claimed that the emotive stances and actions which he presented arose spontaneously, their origins deep within nervous tissues, muscle bundles and the processes of neuromotor excitation.¹³

Like Charcot before him, Richer denied that he in any way directed or actively solicited those performances which he documented. As he repeatedly claimed, such aesthetic phenomena were nothing but "a different manifestation of the same principle, the truth" (1903, 32). Having carried out this act of clinical and pedagogic reduction of performance to its purist, most unaffected forms, Richer then instructed his students on how to use these elements as building blocks to produce the *mise en scène* which made up ideal artistic representation itself. He proposed, for example, that one of the "expressive walks" which he had scientifically captured in photography constituted the ideal "type of warrior's

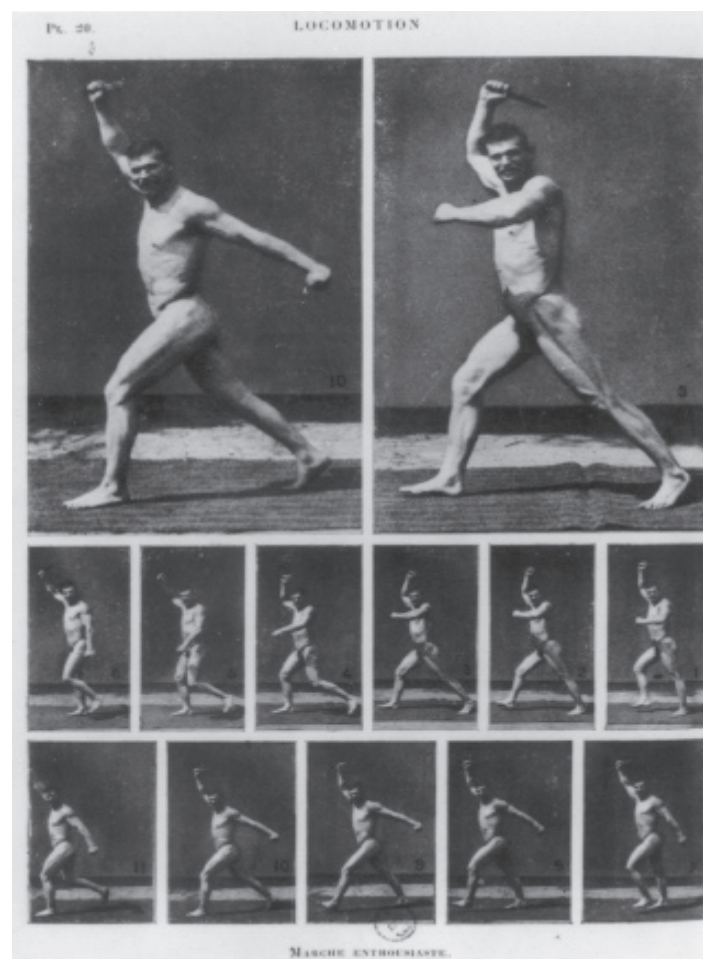


Fig. 8. Chronophotography by Londe and Richer, from Richer, *Nouvelle anatomie* (1889-1929). Courtesy of E.N.S.B.A..

gait, an enthusiastic gait” or “an antique warrior returning from a victory, or better yet, more simply, he is a man of the people singing” the Republican national anthem of “the *Marseillaise*” (Richer 1901, 215). As throughout the rhetoric of Richer, Meige and Duval, the lecturer’s description collapsed athletic performance into an ideal representation of national and racial health, Republicanism, and the scientifically verifiable nature of this new dramaturgical form.

This attempt to describe an invariant, immanent performance appeared in Richer’s writings as early as 1897, in the context of his discussion of representations of running. Comparing the sculptures of the Tuilleries gardens in Paris with the latest chronophotographic findings, Richer conceded that the Tuilleries marbles effectively gave the “*impression*” or “*sensation* of running with its speed” (1897, 215-226; 304-320; my italicisation]. The poses found in these “aerial” looking figures had become the “favourite” if not “tyrannical” and immutably “fixed” image of how running was thought to be performed. Richer and his peers could now demonstrate though that at no stage was such a position actually held by an individual. “Physiologically,” he noted, these “artists are deceived” (1897, 215-222). This was not the case when one turned to Classical friezes such as those which adorned the Parthenon.

The representation of movement had been for Greek art a triumph . . . certain images of running, in particular, are of a truthfulness that have found their justification today in the

the series produced by instantaneous photography (Richer 1889-1929, vol. 5, 399).

While neither the Greeks nor the Romans had conducted anatomical dissections as such, their passion for the theatrical spectatorship of the moving, athletic nude had enabled them to craft representations which in many ways rivalled those of eighteenth century artists.

Although this could lead one to conclude that photography was a superior form to the conventional plastic arts, here and in other publications, Richer repeatedly stressed that this was not the case. The continued adherence to academic neo-Classicism remained central to his discourse and was justified by the E.N.S.B.A. lecturers through their eulogisation of scientific veracity of Classical sculpture—particularly as it related to the nude in movement. Much as Richer and Duval might admire the work of the ancients, they were insistent that what they were proposing was more than a simple revival of the Classical tradition (unlike Winckelmann in many of his writings). Rather, the final perfection of arts in the modern age was to be achieved by uniting Classical gymnastics with the study of the living model in movement; with modern science, anatomical dissection, and the discoveries of chronophotography. Only this would realise Richer’s new “science of the living nude” (Richer 1903, 24).

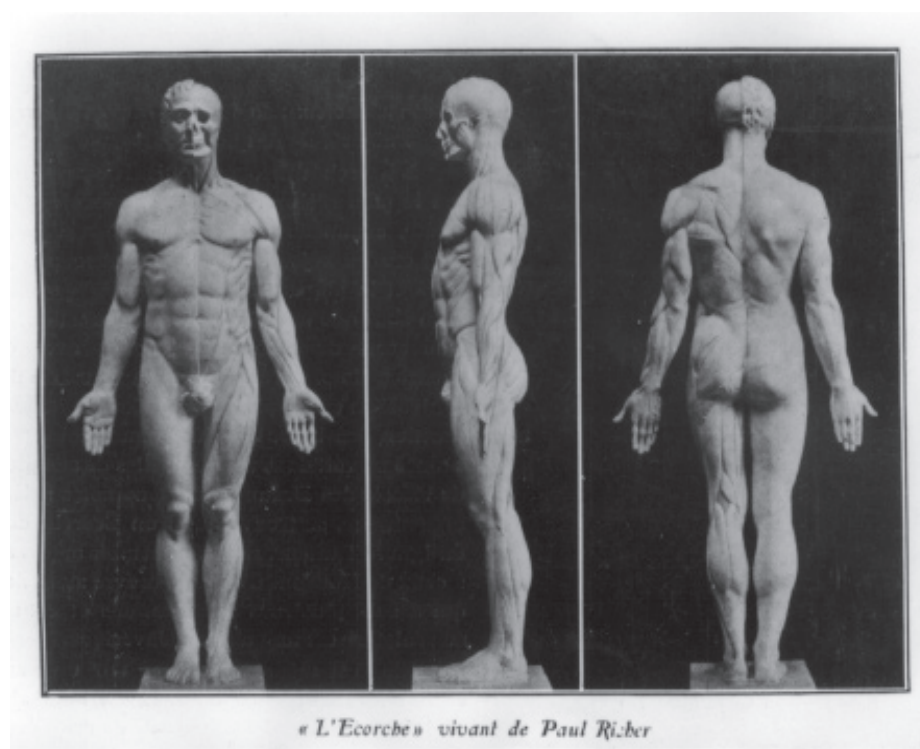


Fig. 9. Paul Richer, *L'écorché vivant* (1906), from Meige, “Écorchés,” p. 1. Courtesy of E.N.S.B.A..

The implications which this had for the teaching of fine arts was clear. It was up to Richer and his scientific peers in France—an inherently “Latinated” country according to the rhetoric of the day (see especially Messing 1996)—to bring to fruition the medical and aesthetic perfection latent within this lost art and social practice by uniting it with a more precise knowledge of internal anatomy, of the exact points to which muscle groups were attached, and how the skeleton moved underneath the skin. This would produce, in Richer’s words, a “living synthesis of the anatomy of death” (1903, 21). Richer had indeed prepared a plastic, iconographic representation of such a synthesis: *L'écorché vivant* (1906; fig. 9; see Richer 1908), a statue of a perfect, idealised human figure whose internal myology was not flaccid and unresponsive, but tensed and dynamic, the bulges visible on the right accurately reflecting the pose, held in the moment, on the left. This canonical form was to be supplemented with such living

“models of well-balanced forms” as Richer’s students might find at modern athletic events, the carnival of Trône, or at the clinic of Marey and Demeny at Joinville (Richer 1897, 36-7).

It was not therefore just a “new art” which Richer was striving to revive, but a whole culture of performance; a symphonic opera of spectatorship and athleticism. It was hoped that the musical rhythms of the performing athletic body itself—and those of its now perfected iconographic representations—would act as the score to revival of such practices in modern French bodies. Richer’s “savants of the future” would re-enact these performances and give life to these iconographic forms, even as he and his peers strove to limit the aesthetic and performative plenitude of such theatrical actions to the rationalised manifestations which the E.N.S.B.A. lecturers felt reflected the healthy ideal. Only through such means could the “admiration of beautiful forms” become once again “in some sense the dogma of a religion,” in which the theatre of the athletic nude would act as the “catechism” of a new, modern cult, to be consecrated through attendance at events such as Pierre de Coubertin’s newly instigated “Olympic games” and through teaching and research at the *École Nationale Supérieure des Beaux-Arts*, Paris (Richer 1903, 22; Arnaud et al 1981, 258-264, 271-290).

Notes

1. Fin de siècle French clown almost invariably included acrobatics, causing Charcot to name the most twisted, physically exuberant phase of hysterical seizure “clownisme.” See: Various 2001 and Guillaïn 1959, 23.

2. Winckelmann’s neo-Classical ideals underpinned the foundation of the post-Revolutionary School of Fine Arts in Paris, as well as much nineteenth century aesthetic theory, while Lessing’s work was referenced by Duchenne de Boulogne and other members of Charcot’s circle. See below in the main text, and Winckelmann 1850 [1776]; Lessing 1970 [1766]; de Boulogne 1990 [1862]; Potts 1994; and Pointon 1990.

3. Space does not allow for a full exploration the racial dimensions of teaching at E.N.S.B.A., except to note that Meige insisted in his opening lesson that to represent Nature in its fullness,

[w]e must also compare the artistic expression of the nude across the ages and across peoples . . . in order . . . to research the variations of the human type . . . / The nude depending upon sex, the nude depending upon age, the nude of the infant and that of the elderly, the nude depending upon the races.

In pursuit of this goal, Meige sought out on Richer’s behalf “a tribe of negroes who exhibited themselves then in Paris” to photograph and study (Meige 1923).

4. Richer’s approach may in this sense be seen as the rationalist-Apollonian counterpart to Warburg—who, like the physician, also ventured art historical readings of the work of Marey and Charcot. See Warburg 1999; Michaud 2004; and Schade 1995.

5 See respectively: Clark 1999; Kracauer 1995 [1947] and 2004; Gordon 2002; Richepin 1913; and Matsuda 1996.

6. The alliance between senior government figures in the Third Republic and French scientists—particularly from the medical institution—is described in Goldstein 1987, Ellis 1990 and Nye 1984.

7. Richer’s œuvre varied from neurophysiological subjects (statues of sufferer’s of Parkinson’s and hemispasm) to athletes, idealised figures from French rural life (notably highly-muscled, male harvesters), and hagiographic medical memorialisation (a medal commemorating Marey; the statue of Alfred Vulpian currently in rue Antoine Dubois, Paris cinquième arrondissement). See Anon 1930-36; Lacronique 1905; Various 1986; and Maier n.d..

8. Meige's own practice for example dealt with: "tics and spasms . . . vocational cramps, spasmodic contortions, troubles of elocution due to stuttering, nothing escaped the wisdom of the artist, any more than [it did] the neurologist or the therapist" (Various 1940, 545).
9. Meige also formed an effective alliance with Edouard Brissaud (interim successor to Charcot's professorial chair, 1893-94) and Pierre Marie (professor 1917-25) to preserve aspects of Charcot's legacy. See Anon, "Henry," pp544-6; Lereboullet 1941.
10. In the English translation above, the phrase "s'est-il appliqué" has been moved to clarify its relation to its subject "la source":
 s'est-il appliqué, tout au contraire, à partir des régions profondes, à puiser à la source même des mouvements, au milieu des groupes musculaires, les raisons du modelé et des attitudes. C'est ainsi que, s'aidant tout à tour du cadavre et du modèle vivant, que, disséquant avec le scalpel le muscle qu'il . . . arrive à rendre l'artiste 'à même d'analyser à travers la peau, comme à travers un voile transparent'" (Roc no date [1880s], unpaginated).
11. Richer was also secretary of the 1900 Exposition's Physiological Commission, working with Marey and Demeny on the photographic study of France's athletes, who were involved in the Congress' demonstration-competitions, often described as the second Olympiad of modern times (Anon 1930-36; Braun 1994, 186-201, 408; see also 'collection de photographies anciens', Bibliothèque d'E.N.S.B.A., Paris).
12. The work of Claude Bernard, Théodule Ribot, Marey, Charcot, Duval, Richer and Meige to some degree reclaimed for Positivist medicine the older, somewhat discredited principles of vitalist medicine (see Hannaway and La Berge 1998, 1-70).
13. Braun and Williams offer a withering critique of the scientific pretensions of nineteenth century American chronophotographer Eadweard Muybridge, noting the constructed, narrative and gendered character of his work. Richer and Londe were far more rigorous in their scientific application of Marey's graphisme than Muybridge, but similar claims may be made of their practice—and indeed that of Marey himself. (Braun 1994, 237-255; Williams 1981).

References

- Anon. 1930-36 "Richer (Paul-Marie-Louis-Pierre)" in Genty, Maurice and Paul Busquet (eds.) *Les biographies médicales: Les maîtres du aujourd'hui: Notes pour servir à l'histoire de la médecine et des grands médecins* Paris: Baillière.
- Apollonio, Umbro (ed.) 1973 *Futurist Manifestos* London: Thames and Hudson.
- Arnaud, Pierre et al. 1981 *Le corps en mouvement: Précurseurs et pionniers de l'éducation physique* Toulouse: Privat.
- Bellugue, P. 1941 "Henry Meige: Professeur à l'École des Beaux-Arts" and Albert Souques "Henry Meige" in *Presse médicale*, 29-30 (2-5 avril 1941), pp. 372-4.
- Bracquias, Eugène 1857 "Notice biographique sur Gerdy, professeur à la Faculté de médecine de Paris" in *Annuaire de l'Aube*, pp. 69-92.
- Braun, Marta 1994 *Picturing Time: The work of Étienne-Jules Marey* Chicago: Chicago University Press.
- Butler, Judith
 —1997 *Excitable Speech: A Politics of the Performative* New York: Routledge.
 —1993 *Bodies That Matter: On the Discursive Limits of "Sex"* New York: Routledge.
- Cabanès, Auguste 1899 "La médecine dans l'art: Un médecin sculpteur, peintre et dessinateur: Le Dr P. Richer" in *Chronique médicale*, 6 (1 mars 1899), pp. 129-138.

- Callan, Anthea
—2003 “Doubles and Desires: Anatomies of masculinity in the later nineteenth century” in *Art History* 26.5: 669-99.
— 1997 “The Body and Difference: Anatomy training at the École des Beaux-Arts in Paris in the later nineteenth century” in *Art History* 20.1: 23-60.
- Charcot, Jean-Martin 1888-1894 *Oeuvres complètes* (13 vols.) Paris: Progrès medical.
- Charcot, Jean-Martin and Paul Richer
—1984 “*Les démoniaques dans l’art*” [1886] suivi de “*La foi qui guérit*” [1892-7] (introduction Pierre Fédida, essai Georges Didi-Huberman) Paris: Macula.
—1972 [1889] *Les difformes et les malades dans l’art* Amsterdam: Boekhandel.
- Clarétie, Jules 1881 “La vie à Paris” [from *Le Temps* (22 mars 1881)] in Clarétie, *La vie à Paris* Paris: Victor Harvard, pp. 123-135.
- Clark, Timothy 1999 *The Painting of Modern Life: Paris in the art of Manet and his followers* London: Thames and Hudson.
- de Boulogne Guillaume-Benjamin Duchenne 1990 [1862] *The Mechanism of Human Facial Expression* (ed. and trans. Andrew Cuthbertson) Cambridge: Cambridge University Press.
- Didi-Huberman, Georges 2003 *The Invention of Hysteria: Charcot and the photographic iconography of the Salpêtrière* (trans. Alisa Hartz) Cambridge, Massachusetts: MIT.
- Duval, Mathias and Albert Bical 1890 *L’anatomie des maîtres. Trente planches reproduisant les originaux de Léonard de Vinci, Michel-Ange, Raphaël, Géricault* Paris: Quantin.
- Ellis, Jack 1990 *The Physician-Legislators of France: Medicine and Politics in the Early Third Republic, 1870-1914* Cambridge, Massachusetts: Cambridge University Press.
- Fried, Michael Fried
—1998 *Art and Objecthood* Chicago: Chicago University Press.
—1980 *Absorption and Theatricality: Painting and beholder in the age of Diderot* Berkeley: California University Press.
- Goetz, Christopher Michel Bonduelle and Toby Gelfand 1995 *Charcot: Constructing Neurology* New York: Oxford University Press.
- Goldstein, Jan 1987 *Console and Classify: The French Psychiatric Profession in the Nineteenth Century* Cambridge: Cambridge University Press.
- Gordon, Terri 2002 “Fascism and the Female Form: Performance art in the Third Reich” in *Journal of the History of Sexuality* 11.1-2 (Jan-April 2002), pp. 164-200;
- Guérin, Alexandre 1887 “Une visite à la Salpêtrière” in *Revue illustrée* 4.40, 4.42 (1 août 1887; 1 septembre 1887), pp. 97-103, 171-7.
- Guillain, Georges 1959 *J.-M. Charcot 1825-1893: His life—his work* (trans. Pearce Bailey) New York: Paul Hoeber.
- Hannaway, Caroline and Ann La Berge (eds.) 1998 *Constructing Paris Medicine* Amsterdam: Rodopi.
- Hervé, Georges 1907 “Mathias Duval” in *Revue de l’École d’anthropologie* 18 (mars 1907), pp. 69-74

- Kracauer, Siegfried
—2004 *From Caligari to Hitler: A psychological history of the German film* Princeton: Princeton University Press.
—1995 [1947] *The Mass Ornament* (trans. Thomas Levin) Cambridge, Massachusetts: Harvard University Press.
- Lacronique, Raoul 1905 *Médecins médaillés: Le Docteur Paul Richer* Chalon-sur-Saône: Bertrand.
- Lereboullet 1941 “Henry Meige (1866-1940)” in *Bulletin de l’Académie de médecine* 5-6:3 (séance du 4 février 1941), pp. 121-5.
- Lessing, Gotthold Ephraim 1970 [1766] *Laocoön* (trans. William Steel) London: Everyman.
- Londe, Albert 1893 “La photochronographie dans les sciences médicales: Le nouveau laboratoire de la Salpêtrière” in *Nature*, 21.2: 370ff.
- Magloire-Bourneville, Désiré and Paul Régnard 1875-77 *Iconographie photographique de la Salpêtrière* (3 vols) Paris: Progrès medical.
- Maier, Nicolas n.d. “Art Nouveau and Art Deco medals—Artists: Paul Richer” on <http://www.finemedals.com/paul_richer.htm>
- Mannoni, Laurent 2000 *The Great Art of Light and Shadow: Archaeology of the Cinema* (trans. Richard Crangle) Exeter: Exeter University Press.
- Marey, Étienne-Jules
—2002 [1894] *Le mouvement* Nîmes: Chambon.
—1882 “La photographie du mouvement” in *Nature* 2, pp. 115ff.
—1878 *La méthode graphique* Paris: Masson.
- Marsh, Anne 1993 *Body and Self: Performance art in Australia 1969-92* Melbourne: Oxford University Press.
- Marshall, Jonathan
—2008a “Dynamic Medicine and Theatrical Form at the fin de siècle: A formal analysis of Dr Jean-Martin Charcot’s pedagogy, 1862-1893” in *Modernism/Modernity* 15.1 (Jan 2008): 131-153.
—2008b “Beyond the Theatre of Desire: Hysterical performativity and perverse choreography in the writings of the Salpêtrière school, 1862-1893” in Peter Cryle and Christopher Forth (eds.) *Sexuality at the fin-de-siècle: The making of a central problem* Newark: Delaware University Press. In press.
—2007a “The Priestesses of Apollo and the Heirs of Aesculapius: Medical art-historical approaches to ancient choreography after Charcot” in Amy Wygant (ed.) *Stagecraft and Witchcraft special edn. of Forum for Modern Language Studies* 43.4 (October 2007): 410-426.
—2008b “Embodied Modernism, Visual Arts, and the Aesthetics of Roger Kemp and Rudolf Steiner” in *Art Bulletin of Victoria* 47: 24-35, 70-71.
—2003 “Nervous Dramaturgy: Pain, Performance and Excess in the Work of Dr Jean-Martin Charcot, 1862-1893” in *Double Dialogues* 4 (Winter 2003)
<http://www.doubledialogues.com/issue_four/marshall.htm>
—2002 “Performing Hysteria: Charcot and the problem of theatrical representation” in *Proceedings of the Western Society of French History* 28 (2002): 19-26.

- Mathon, Catherine, Michel Poivert, Laurent Mannoni et al 1997 *L'art du nu au XIXe siècle: Le photographe et son modèle* Paris: Bibliothèque Nationale de France.
- Matsuda, Matt 1996 *The Memory of the Modern* Oxford: Oxford University Press.
- Meige, Henry
- 1934 “Paul Richer et son œuvre” in *Presse médicale* 6: 123-6.
 - 1926 “Les ‘écorchés’” in *Aesculape: Lettres et arts dans leurs rapports avec les sciences et la médecine* 1.1 (janvier 1926), pp. 1-7.
 - 1923 *École Nationale Supérieure des Beaux-Arts Cours d'anatomie. Leçon d'ouverture (18 décembre 1922)* Paris: Masson.
 - 1914 “À propos du groupe *Tres in una* de M. Paul Richer” extrait de *Nouvelle iconographie photographique de la Salpêtrière* (mars-avril 1914) pp. 118ff, reprinted in Richer, *Nouvelle anatomie* 5: 353-366.
 - 1898 “Charcot artiste” in *Nouvelle iconographie photographique de la Salpêtrière* 11: 489-516.
- Messing, Scott 1996 *Neoclassicism in Music: From the Genesis of the concept through to the Schoenberg/Stravinsky Polemic* New York: Rochester University Press.
- Micale, Mark 1993 “On the ‘Disappearance’ of Hysteria: A study in the clinical deconstruction of a diagnosis” in *Isis*, 84, 3: 496-526.
- Michaud, Philippe 2004 *Aby Warburg and the Image in Motion* (trans. Sophie Hawkes, foreword Georges Didi-Huberman) New York: Zone.
- Muller-Alsbach, Annja and Heinz Stahlhut (eds.) 2004 *Kurt Schwitters: Merz—A Total Vision of the World* Bern: Benteli.
- Nye, Robert 1984 *Crime, Madness, and Politics in Modern France: The Medical Concept of National Decline* Princeton: Princeton University Press.
- Pointon, Marcia 1990 *Naked Authority: The Body in Western Painting 1830-1908* Cambridge: Cambridge University Press.
- Potts, Alex 1994 *Flesh and the Ideal: Winckelmann and the Origins of Art History* New Haven: Yale University Press.
- Retterer, Éd 1907 *Mathias Duval (1844-1907) Sa vie et son œuvre* extrait du *Journal de l'anatomie* Paris: Alcan.
- Richer, Paul
- 1919 *Canon des proportions du corps humain* Paris: Delgrave.
 - 1908 “L'anatomie vivante: Leçon d'ouverture du cours d'anatomie de l'École Nationale de Beaux-Arts (9 novembre 1908)” in *Bulletin médical* 96 (5 décembre 1908): 1081-9.
 - 1907 “L'anatomie et les arts plastiques” *Séance publique annuelle des Cinq Académies* (25 Oct 1907): 12.
 - 1903 *École Nationale et Spéciale des Beaux-Arts: Cours d'anatomie. Leçon d'ouverture (25 novembre 1903)* Paris: Masson.
 - 1901-03 “Locomotion humaine” in Arsène d'Arsonval, Étienne-Jules Marey, et al (eds.) *Traité de physique biologique* 2 vols. Paris: Masson.

- 1897 *Dialogues sur l'art et la science* extrait de *Nouvelle revue* (1 et 15 juillet; 1 août 1897) Paris: Auxerre.
 - 1897 “La figuration artistique de la course” in *La revue de l'art ancien et modern* 1 (juin 1897).
 - 1895 *Physiologie artistique de l'homme en mouvement* Paris: Octave Doin.
 - 1890 *Anatomie artistique: Description des formes extérieures du corps humain au repos et dans les principaux mouvements* Paris: Plon.
 - 1889-1929 *Nouvelle anatomie artistique* (7 vols.) Paris: Plon.
 - 1885 *Études cliniques sur la grande hystérie ou l'hystéro-épilepsie* Paris: Delahaye et Lecroisnier (deuxième édition).
 - 1881 *Études cliniques sur la grande hystérie ou l'hystéro-épilepsie* Paris: Delahaye et Lecroisnier.
- Richepin, Jean 1913 “À propos du tango” *Séance publique annuelle des Cinq Académies* (25 Oct 1913): 79-89.
- Roc, Étienne no date (1880s) “Professeur Mathias Duval” in *Hommes d'aujourd'hui* 273, unpaginated.
- Schade, Sigrid 1995 “Charcot and the Spectacle of the Hysterical Body: The ‘pathos formula’ as an aesthetic staging of psychiatric discourse” in *Art History* 18.4 (Dec 1995): 499-517.
- Starr, Moses Allen et al 1926 [23 Nov 1925] *Minutes of Boston Medical History Club centenary meeting, Boston Medical and Surgical Association* 194: 10-20.
- Various 2001 *Des clowns: Cahiers d'une exposition* Paris: Bibliothèque Nationale de France.
- Various 1986 *Le leçon de Charcot: Voyage dans une toile* Catalogue d'exposition. Paris: Musée de l'Assistance Publique des Hôpitaux de Paris.
- Various 1940 “Henry Meige (1866-1940)” in *Revue neurologique* 94, 12 (1940): 545.
- Vurpas 1934 “Éloge du Pr Paul Richer” in *Revue neurologique*: 55-59.
- Warbug, Aby 1999 *The Renewal of Pagan Antiquity: Contributions to the cultural history of the European Renaissance* (trans. David Britt) Los Angeles: Getty Research Institute.
- Wagner, Richard 1970 *Wagner on Music and Drama* (trans. Ashton Ellis) London: Gollancz.
- Williams, Linda 1981 “Film Body: An implantation of perversions” in *Ciné-Tracts* 3, 4 (Winter 1981): 19-35.
- Winckelmann, Johann Joachim 1850 [1776] *History of Ancient Art Among the Greeks* (trans. Henry Lodge) London: Chapman.

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