

The Beat of 5 Hearts: Dagognet, Duchamp, Marey and 'la route Jura-Paris'

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Abstract.

Reforms in attitudes to physical health can be seen in illustrations to French army manuals between 1902-1914. In these we see line drawings that correspond, to chronophotographic images of E-J. Marey – and from these we might wonder how far these images informed Marcel Duchamp's early masterpiece, *Nu descendant un Escalier*, no°2 (1912). François Dagognet makes the link between Marey's photographs and Duchamp's painting but he does not discuss another important project of 1912 entitled *la route Jura-Paris*. This paper considers Dagognet's writing on cardio-vascular experiments by Marey and wonders if his approach might not offer a methodology to unravel the multivalent aspects of Duchamp's note of 1912. The paper closes with a review of the author's artistic practice in relation to this and to other concerns of Marey dealing with the movement of air and water.

(fig 1)

When did we note the connection between Marcel Duchamp's *Nu Descendant un Éscalier* (fig 2) and Etienne-Jules Marey's sequential photographs of the 1880s (fig 3)? For thirty years Duchamp was quiet on the subject and seems more concerned to develop the painting's American notoriety (fig 4), rather than its actual pedigree. Speaking about chronophotography, in the mid-1960s, he would say rather dismissively: '*Ça a l'air prétentieux comme formule, mais c'est amusant.*'

His first biographer, Robert Lebel, side-steps the issue, which is strange, since the English translation of *Sur Marcel Duchamp* (1959), displayed the photograph of a fully clothed Duchamp, chronophotographically descending a studio staircase, on its cover. (Eliot Elisofon. 1952) (fig 5) It seems that Duchamp, at sixty-five, had offered to

strip-off for the photo-shoot – and although his suggestion was not followed, it nevertheless helps to confirm the gender, even the actual identity of the nude in the painting. In replicating the gravitas of the 1912 original, we see a simultaneous acknowledgement of sequential photography, but also a distancing from the vigorous dynamism, emanating from the *Parc des Princes* and *l'Hôpital de la Pitié-Salpêtrière*.

It is not until we read Pierre Cabanne's *Entretiens avec Marcel Duchamp* in 1967 that we get an explicit connection, but Linda Henderson's 'Duchamp in Context' (1998) has now shifted the focus, showing how Paul Richer's diagrams provide the probable model (fig 6). Of course, Marey's illustrations in *Le Mouvement*, in (1895) still need attention, although it might be illuminating to see what the seven-year-old was actually drawing at the time of Marey's publication (fig 7).

Surely, this laborious intensity is not greatly different from the efforts of other boys, neither in this nor in the artworks before 1911 was 'mareysien' dynamism very evident until perhaps, the *Moulin à café* of 1911 (fig 8). But Duchamp seems more concerned to reveal the concealed workings of the machine here. Workings that ordinarily remain hidden from view and this breakdown of working parts, perhaps unnecessary in the quotidian operation of a coffee grinder, would appear urgently in illustrations to the *Manuel d'Infanterie à l'usage des sous-officiers et caporaux* (1902-1915), which Duchamp would study for his promotion to corporal in 1906 (fig 9). Before he could get to the relevant section, however, there were 85 pages on *l'Éducation Physique* (fig 10). Of the many pictures here, of men flexing muscles there are several of soldiers jumping over obstacles, depicted in arrays of five or six figures (fig 11). Obviously, these drawings bear a generic relationship with Marey's photographs of the 1880s (fig 12). Is it therefore possible that the 18 year-old corporal encountering a 'mareysien' dynamic, in the pages

of this military publication, would carry its ideas forward when painting his *Nu descendant un Escalier*? If so, the army will need to be complimented on its perspicacity and its contribution to modern art!

François Dagognet, links Marey with Duchamp's 'Nude' in *La Passion de la Trace* (1987) and later Duchamp reappears with the readymades, this time, in *Pour l'Art d'Aujourd'hui: de l'objet de l'art à l'art de l'objet* (1992), which is Dagognet's assault on the representational impulse in art; and so his interest in Duchamp is unsurprising. But it leads me to wonder how frequently Duchamp appears within Dagognet's writing, more generally? If so, did Dagognet wonder about a different work – conceived, appropriately enough, while Duchamp was working as an employee, here, at the, *Bibliothèque Sainte-Genève*? The work is known as *la route Jura-Paris* and reflecting its origins in the *bibliothèque* it exists only as a series of provisional texts – rough ideas, perhaps, for a future work (fig 13).

In these texts Duchamp details the operations of an aggressive force, working in rigorous formation along a path of conquest, designated as *la route Jura-Paris* (fig 14). In order to succeed, this group will need speed and the ability to reconfigure, not only with one-another, but also with the materiality of the road. The ease and ability in doing this is a given in the text, but their motivations are left unstated. However, the mantra-like repetition of the title (fig 15), *la route Jura-Paris*, inescapably locates the terrain within *l'hexagone* itself and the time indicated is the historical urgency of France in late 1912 and not any other parallel conception.

The language of *la route Jura-Paris* speaks in two voices. There is a marked difference between them. The first voice is heard in the

unadorned coupling of two place names ‘Jura’ and ‘Paris’ – as we know, separated by 480 kilometers of changing road, but here linked by a lexical hyphen that edits away any reference to contingent events; discomfort, breakdown, trauma, hazard. This removal of the subject, invokes Duchamp’s strategy of the readymades, the art form he uses to bi-pass narrative, representational art in favour of direct ‘presentation’ – that parenthetically, Dagognet so approves. Accordingly, Duchamp chooses a familiar, object of little commercial value, extracting its utilitarian context and resonance, while filling the vacant space with the fatuous aura of a gallery artwork. François Dagognet in *Pour l’Art d’Aujourd’hui* describes the chemistry that creates the readymade in this way: (fig 16)

L’objet qui sort de la chaîne de fabrication, l’utilitaire le plus plat, sans grande modification matérielle, qui subit qu’un acte de subversion et de conversion, devient ‘une oeuvre d’art’ à part entière. (Dagognet: 1992: 62)

And so his readymades (fig 17-21): *Peigne – Porte bouteille – Roue de Bicyclette – Pharmacie – Porte; I I Rue Larey* become exemplars that: ‘*sans grande modification matérielle*’ have been elevated to this status. In this sequence, they increase in size and scale, expanding into the commercial enterprise of *Pharmacie* and finally ending at *Rue Larey*; but why should this trajectory stop at a street address in the *cinquième arrondissement*? Might it not continue for a further 480 kilometers, eliminating *ennui*, perhaps even love in the brief heart-beat of time that it takes to travel the ‘*trait d’union*’ between ‘Jura’ et ‘Paris’?

The second voice is heard across an occult and shifting landscape that Duchamp has us explore. The dictionary definition for the term ‘occult’ describes a ‘state of being cut off from view’, or perhaps ‘*un état*

d'être caché de vue' and so, in this second reading, the narrative of the road curls away from the hyphenated place names and enters the ambiguous possibilities of Duchamp's obscure textual arrangements. We learn that it is no ordinary transit, down the smooth, *autoroute 6*, nor is it merely the challenging journey over the damaging '*silex*' and the shocking '*collisions*' in the quagmire of the road in 1912 that might be imagined as the expected conditions of motor travel at that time. Beyond the title *la route Jura-Paris* we encounter the inexplicably shifting ground and hybrid entities that move in menacing support of *l'enfant phare* (fig 22-23). This 'occult' voice intones the dilemma of a weird, unpopulated terrain that stretches from France's liminal borders to the metropolitan center along which a disorienting process of territorial subjugation takes place.

Would François Dagognet have been interested in this project? In *L'Art d'Aujourd'hui* he gives considerable space to the artists Christo and Jeanne-Claude (fig 24), finding in their interconnections, a space that simultaneously reveals as it conceals and this suggests that the internal-external dichotomies contained within *la route Jura-Paris* might resonate for him also.

(fig 25) Marcel Duchamp wrote *la route Jura-Paris*, following a motor trip with his friends, Francis Picabia and Guillaume Apollinaire, when they collected Gabrielle Buffet from her family home near the Swiss border and bring her back to Paris between 26th and 31st October 1912.

The journey is, I think, erroneously seen as a light-hearted affair that encouraged an interest in word games. Certainly puns appear in

these notes, *5 nus*, *enfant-phare*, even *Jura-Paris* (fig 26), all have punning, perhaps sexual, connotations, but otherwise, there is little that might encourage light heartedness here. It had been an exhausting journey and potentially hazardous on the steep inclines of the Jura at night. Gabrielle Buffet described their arrival, traumatised by the drive, arriving '*dans une pluie diluvienne*' (1957). Duchamp wrote four notes, of no more than 700 words in texts of differing lengths, but none of them consider the sort of travel detail that Buffet describes. We do not read about *la route*, the pouring rain, the steep inclines and certainly not the humorous repartee.

(fig 27) Duchamp had just completed his painting *La Mariée* in the isolation of his darkened room in Munich and no doubt, it conveys something of his unattainable yearning for Gabrielle. At the painting's core is the mysterious change that accompanies the transformation from virgin to bride. The change is not necessarily gynecological and without an obvious physiological reference point this existential moment will require the forms of *mareysien* sensitivity, Dagognet describes, before it can be detected and brought to pictorial visibility on the surface of the canvas. However, rather than refining his instrumentation and allowing the body to write its own data by means of i) a sensor ii) a transmitter iii) an inscription device – Marey's checklist for calibrating his *sphygmograph*, (fig 28) the apparatus that would finally bring into visibility a reliable trace of the human pulse – Duchamp reverses these procedures, ignoring the received wisdom of *mareysien* science using, instead, his fingertips to massage into an image the subtle transformations.

Subsequently, there would be much in Duchamp that would reflect Marey's methodology, but this would be after the journey to the Jura. The months to come would see increasingly precise technical developments in Duchamp's practice, (fig 29-30) none more so than his 3

Stoppages étalon (1913), where he devises a new unit of measurement based on the distortion of the meter rule and devises, no doubt, a suitably delicate apparatus to obtain its graceful deformations. Modern scholarship is at sixes and sevens over how Duchamp might have achieved these marvelously consistent results, but pending anything more definitive, an important lesson may be drawn from Dagognet's sinuous expression of Marey's method: (fig 31)

la Nature doit en quelque sorte se déposer elle-même et se traduire par des inflexions de courbes ou de fines trajectoires vraiment représentatives.

(DAGOGNET: 1987:26)

– Si un fil droit horizontal d'un mètre de longueur tombe d'un mètre d'hauteur sur un plan horizontal en se déformant à son gré et donne une figure nouvelle de l'unité de longueur.

– Les 3 stoppages étalon sont le mètre diminué. (DUCHAMP: Boîte de 1914)

The rhythms and *dramatis personae* of *la route Jura-Paris* may be familiar to us, but finding a coherent rationale for its finer intention even its broad outline is more difficult. François Dagognet, writing about the seeming impossibility of Marey's task in developing ways to examine the functioning heart provides us with what we might call his 'discourse of the periphery'. Reading Dagognet on Marey, I begin to see that any consideration of *la route Jura-Paris* will be most successfully achieved from the liminal position that the scientist and the philosopher, both recommend. This way *la route* might begin to reveal itself more freely, rather than by scholarly vivisection or other forms of academic intrusion. Marey shows that inserting a fistula into an artery will not always guarantee the free passage needed for proper understanding of

the delicate organism. Necessarily we will come to appreciate that any understanding, any bringing to light of Duchamp's route *Jura-Paris* will have to proceed by applying more sensitive ways with peripheral tools. (fig 32)

'A son insu, le médecin tient finalement un rôle d'écran: il déforme, ralentit ou néglige. Il s'interpose; il peut capter que des phénomènes d'ensemble; il faut donc se substituer à lui – entendons écarter irrémédiablement ses propres appareils récepteurs, la vue, le toucher, l'ouïe – inventer des procédures d'inscription directe, afin d'arracher à la vie ses secrets, la mettre au dehors et l'obliger à une "écriture directe" (la graphie). (DAGOGNET: 1987:19)

Earlier, I tried to undo the way Dagognet links Duchamp with Marey's sequential photographs. There is, nevertheless, a different case to be made, based on the refining of technique that rejects the results of the prejudiced eye and the falsifying hand. Both Marey and Duchamp were in search of dispassionate, solutions to bring in to light the occluded topics of their research. Can we not compare their methods? One inscribes, so delicately, the motions of a living heart without recourse to human interference; the other augments the capabilities of his demoralized conscripts, delicately breathing an affirming gas into the void created by their missing auricles and ventricles in *le Cimetière des uniformes et livrées*, in the build-up to 1914? (fig 33-34)

Éloignement: Contre le service militaire obligatoire:/ un "éloignement" de chaque membre,/ du coeur et des autres unités anatomiques;/ chaque soldat ne pouvant/ déjà plus revêtir un uniforme, son/ coeur alimentant

téléphoniquement/ un bras éloigné, etc.// Puis, plus d'alimentation; chaque "éloigné" s'isolant.// Enfin une Réglementation/ des regrets d'éloigné à éloigné.

I would like to finish this section with a different note by Duchamp, written probably, while still working at the *bibliothèque* (fig 35). It provides a glimpse into his state of mind; exemplified by his estrangement and unexplained isolation in Munich and his disappearance into the *Sainte Geneviève*. In it we see his sardonic views on France's military preparations, offering *téléphonique* solutions that would seem unhinged even in the most paranoid of Pentagon departments. To this we might add much of what we can understand from *la route Jura-Paris*. The 'service militaire obligatoire' note also bears on his appeal for a military discharge by virtue of an *insuffisance cardiaque* that he claimed to suffer from – although no such problem appears on his military papers – and so, perhaps we begin to see that for Duchamp, references to the heart cannot be taken at face value but that through its metaphor other concerns are revealed (fig 36). In dealing with the heart, we return to *la machine à 5 coeurs* of *la rue Jura-Paris*, as well as his "éloignement" ... *du coeur et des autres unités anatomiques*; but perhaps most of all the heart and its regulations and measurements according to Marey's scrupulous process, that I get through Dagognet and now believe influenced Duchamp at an absolutely fundamental level.

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I will finish this paper by talking about my own practice, which has a bearing on some of this material.

(fig 38) *Peindre 5 nus statiquement, me semble sans intérêt, pas plus d'ailleurs que de peindre la route Jura-Paris même en élevant l'interprétation picturale de cette entité à un état tout à fait dénué d'impressionisme.* (DUCHAMP: note 111).

1). Location

For years now, I have been making drawings from a small rowing boat on a tidal river in South Wales (fig 39). Seawater pushes into a long, narrow and very deep gorge with alternating muddy banks and steep cliffs. (fig 40) When the tide rises to 14 meters it allows me to go out in my boat and draw for about an hour before drawing becomes impossible when the river starts dropping with a speed that makes it dangerous to navigate in a small boat.

2). Forces.

On my next session, I will be carried upstream for perhaps a kilometer, before the tide slows. The water's surface is punctuated with sudden upsurges, created by the meeting, fifteen meters below me, of sea and river water being forced to the surface in turbulent cumuli of silt. (fig 41-44)

3). Drawings.

(fig 45) These are very unlikely surroundings to be emulating Marcel Duchamp, nevertheless he might recognise a distant echo of his '3 *Stoppages étalon*' although he might also surmise, as I did very rapidly, that it is the river that effectively does the drawing; and as the artist, sitting upon the river, I merely absorb its fluctuations like a sphygmograph graphically describing the pulse on a wrist (fig 46-47).

Calling them ‘my drawings’ is perhaps a misnomer. Nevertheless, in this way I check and monitor the data with i) a sensor (the boat) ii) a transmitting device (the artist) iii) an inscription device. When I lose sight of the river’s beautiful scenery, as indeed I do in these drawings, I can only blame science, or at least, the part that is responsible for Marey’s sphygmographic methodology – although Duchamp’s disenchantment with *impressionisme* might have something to do with it too.

4). Smoke

The competing forces below the surface are amplified by a succession of tight river bends that create unpredictable turbulences. (fig 48) I look at Marey’s photographs of air currents meeting solid objects and I wonder how I might, possibly, model the invisible turbulence beneath me.

5). Comparison

Saint-Exupery, flying over the Andes in the 1920s negotiated invisible weather-fronts that dangerously affected the stability of his airplane. Saint-Exupery’s experiences were sublime, of course and I am wary of comparing my muddy river with the pioneering aviator’s exploits; but in my boat I think I do detect the river’s ‘occult’ pulse. (fig 49)

6). Process

In 1913 (fig 50), Duchamp held his meter of thread very precisely one meter off the ground before releasing it to fall to the floor. He obtained three results in this fashion, all three similar but different. In the manner of Duchamp, I restrict my gaze to a restricted vertical sweep using three pencils, and trying to register the things that appear within this narrow field (fig 51-52). Because the eyes work vertically and the boat moves

horizontally, a discrepancy occurs between the things the eyes see and the events the pencils are trying to capture. Each time I look back, the reality has slipped downstream, with my pencils elastically following the disappearing event, before being brought back to their proper line of axis.

7). Mark

I have made hundreds of these drawings and, as such, they were going to remain until I stepped on one in the bottom of the boat, leaving an imprint of my boot across its surface. (fig 53)

8). Chance

(fig 54) This pattern reminded me again of Duchamp's *3 Stoppages*, leading me to connect-up six drawings with the image of Duchamp's (distorted) meter (fig 55-60). The result makes a traverse across the discrete sheets of paper, combining them in a fluid pattern in brown ink that might invoke the swirling current, the slippery banks of mud or the inscrutable surface of the water – or they might simply say, with some justification that this is a pattern made up of lines of brown ink. (fig 61-64)

9). As I am carried upstream, on the next occasion, I will be reminded of François Dagognet and his 'discourse of the periphery' and I will continue to wonder how I can bring to image the columns of silt climbing towards me that show themselves only when they get to the surface. How I will do this, I do not know; and so I will leave the final observation to Saint Exupéry:

*'Il est très simple: on ne voit bien qu'avec le cœur. L'essentiel est **invisible** pour les yeux.'*

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