The Contracted Joint
Carl Douglas

*The Social Contract* begins with chains, and remains entangled in questions of binding. The chain figures for arbitrary constraint, and is something to be thrown off. Rousseau distinguishes between the natural bond of the family and the arbitrary bond of the chain. The child is bound to the father by necessity (the maternal bond is never raised), but once the child becomes independent, this bond dissolves: the child and father are freed from this relation, and if it persists, it is no longer natural, but a matter of mutual agreement. All legitimate authority, asserts Rousseau, must be based on agreement, and he sets himself the task of describing a society of this kind. He explicitly describes this as a building project, for which the ground must be cleared and tested, the structure carefully maintained, and collapse avoided.

The state is a collective identity formed by very specific relationships between individual elements. By freely entering into the social contract, a corporate body is formed, a "public person... once called the city". This entire social edifice takes its form from the necessity imposed by the structure of its joints. Although a social whole is formed, the parts must remain autonomous, such that each individual may have a private will distinct from the general will, even to the extent that the individual may withdraw from the contract entirely. This freedom to renounce society is an essential factor. The joints of Rousseau's social structure must not be bound or fused.

Rykwert has suggested a correlation between Rousseau's primitivism and that of Marc-Antoine Laugier. Both appeal to the authority of an idyllic natural origin in order to establish the possibility of a natural culture. For Rousseau, the hut is both scene and model for elemental social relations. The primitivity of the hut is mirrored by primitive society. In *The Social Contract*, Rousseau argues that the family is the only natural society. He saw the progressive elaboration of the materiality and detailing of architecture as markers of human degeneration, of the fall away from the essential social relations established by the hut.

In his drawing for the 1755 edition of the *Essay on Architecture*, Laugier's hut is conspicuous for its structural self-sufficiency. The individual elements: the still-living columns, the cross-beams and the rafters, all rest together naturally, without pins or bonds. The four tree-columns have been pruned, and the stumps of the branches become brackets to support the beams. The trees retain their leafy growth, except possibly for the front left, which looks as if it has been trimmed back to the trunk. The rafter branches sit up at an improbably steep angle. They rest on the beams without any evident support: the expected bindings are absent, and the rafters do not appear to be notched onto the beams. At the ridge, the rafters rest against one another. A ridge-beam is possibly hinted at, but looks as if it is suspended under the rafters rather than providing any substantive support. Again, there is no hint that the rafters are bound or pinned together at the top; and they cannot be interwoven, because the branches are conspicuously blunt. Perhaps Architecture's gesture in the image could be re-interpreted as a gesture of blame for the collapse of the Ionic edifice in the foreground that has attempted to follow the structural logic of the Laugier's hut - no wonder the cherub appears shocked.
It is evident, of course, that Laugier did not intend his hut to be understood as an exemplar of construction practice, but as a moral model. But to point out the strange condition of the joints in Laugier's image is not entirely perverse. The model does express, after all, deliberate principles of construction. It is used to demonstrate the essential elements of architecture, and to exclude those elements which are superfluous additions, "essential defects" (12).

In his written description of the primitive hut, there is little further information about the joint to be found. Perhaps consideration of joints is included amongst those details with which Laugier felt disinclined "to load this little work" for fear they might "trouble and distaste the reader" (xvi).

In the chapter of his essay which directly addresses construction, the strength of a building is said to depend on the choice of good material, disposed with consideration of loadpaths and bearing. Mortar is to be minimised. It is obvious that Laugier has in mind on one type of joint: the stacking of masonry. In his primitive hut, the joint is of no importance. Laugier's ideal structure requires nothing other than gravity to hold it together. The beams are "laid" on the columns. Columns are to "bear immediately upon the pavement, as the pillars of the rustic cabin bear immediately on the ground" [15]. Engaged columns are permitted as a "licence authorised by necessity" [16], but they must not be lost into the mass of the wall - they should be engaged "a fourth part at most... so that even in their use they may always retain something of that air of freedom and disengagement," [16].

For Laugier, parts must remain distinct, even while they form an integrated architectural body. They must be seen to be distinct (as the columns must be seen to be distinct from the wall); and they should need a minimum of concern for attachment: there is an expected natural co-dependence of parts.

[ freestyle here: idealise connection in same way, reading into them in a way neither would have approved. extend line of thinking by looking at how this logic is shifted by the idea of the crowd ]

Given the very close correspondence of Rousseau and Laugier's idealisation of connections (and while acknowledging that we are reading into the two men in a manner neither would have approved), we can entertain the possibility of an extended questioning of the joint which overlaps the physical connecting of architecture with the immaterial jointing of social relations.

The Crowd

Rousseau's description of social structure was problematised by the emergence of the crowd. By the end of the nineteenth-century, which looked back to Rousseau past a hundred years of episodic revolutions, particularly in France, crowds became a pressing issue. The nineteenth-century discourses of sociology,
criminology, politics, psychology and urbanism are all marked, and in part defined, by a new concern for crowds.

In 1895 Gustav Le Bon introduced his *Psychologie des Foules* by noting the urgency of a satisfactory account of collective behaviour with an accusatory barb aimed at Rousseau and his philosophical descendants:

"Today the claims of the masses are becoming more and more sharply defined, and amount to nothing less that a determination to destroy utterly society as it now exists, with a view to making it hark back to that primitive communism which was the normal condition of all human groups before the dawn of civilisation." [lebon, 15-16]

Le Bon goes on to define a crowd as essentially a psychological entity.

"Under certain given circumstances, and only under those circumstances, an agglomeration of men presents new characteristics very different from those of the individuals composing it. The sentiments and ideas of all the persons in the gathering take one and the same direction, and their conscious personality vanishes. A collective mind is formed, doubtless transitory, but presenting very clearly defined characteristics... It forms a single being, and is subjected to the law of the mental unity of crowds." [lebon 23-24]

As with Rousseau, a greater unity is formed from social constituents. But for Rousseau, this is a matter of agreement and elevates humans, while for Le Bon it is a matter of instinct and degrades them. For Le Bon, it is the collective that is primitive. The subjection of the individual psyche to the crowd is understood by Le Bon as an actual physical effect on the body. The individual does not retain autonomy, as it does in Rousseau's society. The body enters a 'special state' close to that of hypnosis, in which the higher functions of the brain are suppressed. A collective persona is formed, but this is no society, merely a crowd. A crowd is therefore a state of collapse of the individual, willing, subject.

"By the mere fact that he forms part of an organised crowd, a man descends several rungs in the ladder of civilisation. Isolated, he may be a cultivated individual; in a crowd, he is a barbarian - that is a creature acting by instinct. He possesses the spontaneity, the violence, the ferocity, and also the enthusiasm and heroism of primitive beings, whom he further tends to resemble by the facility with which he allows himself to be impressed by words and images - which would be entirely without action on each of the isolated individuals composing the crowd."

A crowd attains its mental unity at the expense of individual civility. In Le Bon's view, essentially rational civilised individuals degenerate through the formation of crowds, becoming savage: mentally weak, and violent. Rousseau's view is less stark. On their own, humans are savage, but for Rousseau, this means they are free. The formation of social structures allows the arrival of civility, even if it also entails certain vices. There is a loss of savage individualist innocence. There is thus a fundamental disagreement between Le Bon and Rousseau about the state of savagery: for Rousseau the savage is innocent and free, but for Le Bon, he is animalistic and irrational.
Many other writers at this time agree that the crowd is something to be mistrusted and feared. Baron Haussmann, in the 1860s worried that Paris was now filled with "a floating mass of workers who have come to the city [today], ready to leave tomorrow, of families whose members are dispersed throughout the city by their diverse places of work, of nomad renters who are incessantly moving from quarter to quarter, without knowing a fixed residence or a patrimonial place. It is an accumulation of men who are strangers to each other, who are attracted only by impressions and the most deplorable suggestions, who have no mind of their own, since they are not dominated by a strong national feeling." [217]

The architecture of these unstable crowds was equally disturbing. The barricades were an agglomerative architecture, a reconfiguring and redistribution of the city. Through repetition barricades became the central gesture of urban insurrection. By the time of the Paris Commune of 1871, the barricades had become primarily a symbolic scene of collective will and spatial disconnection. Previous revolutions had made barricades as part of a general uprising, but (as Bos notes) the Communards of 1871 simply made barricades and waited. The barricades were a way to engage the urban population - passers-by were urged to contribute a paver, thus investing in the insurgency. Victor Hugo described one monumental barricade he had witnessed in 1848:

"Everything had gone onto it, doors, grilles, screens, bedroom furniture, wrecked cooking stoves and pots and pans, piled up haphazard, the whole a composite of paving-stones and rubble, timbers, iron bars, broken window-panes, seatless chairs, rags, odds and ends of every kind – and curses... The Saint-Antoine barricade used everything as a weapon, everything that civil war can hurl at the head of society... a mad things, flinging and inexpressible clamour into the sky."

It seems almost impossible to speak of the joints or tectonics of a barricade. Nothing is positioned with respect to a proper place. There is no hierarchy of elements. The barricades are assembled according to convenience. Barricades are not constructed so much as they accumulate, and it is precisely in this sense that they reflect the properties of the crowd mistrusted by Le Bon and Haussmann: fluidity, lack of ties, and expedient relationship to place.

The barricade is to the crowd what Laugier's hut is to Rousseau's contracted society.

Eugène Viollet-le-Duc was fascinated by crowd spaces. Although he had worked extensively for the Second Empire government, he had been a barricade-builder in 1830, and lent his support to the Paris Commune in 1871.

He saw architecture as deeply implicated in the development of an new organic society. In his second Discourse he demonstrates the potential of new materials by proposing spaces for crowds: a concert hall, a market.
Bergdoll: "Calling for a mixed system of construction, in which cast and wrought iron, brick and stone masonry, and even enamelled tile infill would all be developed to maximize their individual capacities in relation to one another, Viollet-le-Duc called his invention an 'organism' which took its place as the next link in a long chain of architectures for mass gatherings."

The fascination with an organic logic plays out in Viollet-le-Duc's painstaking analysis of the gothic system. A detail from his *Dictionnaire Raisonné* illustrates: The detail is of the springing-point of a Gothic arch. It is a fragment, an excised portion of a structure much larger than itself. It is, in turn severed into parts. Each one is revealed to be distinctly shaped as part of a fluid whole. The arch of the vault is not itself present in any one element, but traverses elements. Each part has its niche, but no element is autonomous. Viollet-le-Duc's reading of gothic order is a response to the logic of autonomy which had, at least since Laugier, dominated classicism. In it, Viollet-le-Duc sought an organic structural model for an organic society.

A more radical view of social order, and the most keen nineteenth-century analysis of the crowd can be found in the work of Gabriel Tarde. He was the source of Le Bon's idea of the group mind, although Le Bon misinterpreted it by describing it as a collective ego. In fact, Tarde was fundamentally opposed to the idea that the study of societies was the study of unities at a scale greater than that of the individual (this brought him into direct conflict with Durkheim). He writes in his *Lois Sociales* (1898) of the fallacy "that in order to see the regular, orderly, logical pattern of social facts, you have to extract yourself from their details, basically irregular, and to go upward until you embrace vast landscapes panoramically."

Social form, Tarde felt, could not be understood macroscopically. Society was, to borrow Bruno Latour's terms, a 'confusing plasma... a brew' instead of an edifice. Tarde refused Rousseau's premise that there could ever be a point when we could move cleanly from talking of interactions and ties at the microscopic scale to analyzing the macroscopic operations of a collective. For Tarde, a society is not a greater whole, but a radical partiality. Individual elements, "soldiers of those various regiments, provisional incarnations of their laws, pertain to them by one side only, but through the other sides, they escape from the world they constitute... [they have] other leanings, other instincts coming from previous enrolments... [they are] made only of sides and facades of beings." The individual is faceted, multiplicitous, split by 'previous enrolments', traversed by tendencies outside themselves.

We might be reminded at this point of Laugier's hut, the elements of which report such prior engagements. The branches, although repurposed as linear elements, retain the forks, bends and inconsistencies of the tree, and the living columns themselves exhibit stumps where their unruly growth has been disciplined by the
The Hut-Builders. The individual elements are not discrete; Tarde would claim that each branch still contains the tree monadically. In his own version of Leibniz's monadology, Tarde proposes that every individual is in fact also a society in which monadic elements are enrolled partially and provisionally. An aggregate structure like a society is only ever connected by certain faces of its constituent elements, and there are always other faces which escape this unity. Identity is thus paradoxically only a means of generating difference. Substituting a philosophy of difference for the philosophy of identity, Tarde writes in a passage reminiscent of Deleuze:

"To exist is to differ; difference, in one sense, is the substantial side of things, what they have most in common and what makes them most different. One has to start from this difference and to abstain from trying to explain it, especially by starting with identity, as so many persons wrongly do. Because identity is a minimum and, hence, a type of difference, and a very rare type at that, in the same way as rest is a type of movement and the circle a type of ellipse. To begin with some primordial identity implies at the origin a prodigiously unlikely singularity, or else the obscure mystery of one simple being then dividing for no special reason."

Tarde takes the multiplicitous order of the crowd not as an exception, but as the rule; and he does this not only for societies of people, but for any accumulation. He speaks of cellular societies, atomic societies, stellar and solar societies. A body is a society of organs. A mind is a society of thoughts which cannot be said properly to belong to it. Bruno Latour explains that for Tarde, "to be a society of monads is a totally general phenomenon, it is the stuff our of which the world is made." In Tarde the crowd becomes the rule, and the world takes on the microsocial order of the barricade: a temporary assemblage of elements (animate and inanimate) which have allegiances elsewhere.

Raising the question of the Crowd in New Zealand

In what remains of this brief paper, I want to locate these thoughts in a New Zealand context, and outline my view of an architectural prospect.

The primitivist tendencies of the New Zealand modernist tradition have been well established, particularly by Clark and Walker in Looking for the Local. Following Mitchell's observations regarding the important position the concept of the shed has had in New Zealand architectural thinking, they point to the development of the concept in the 1950s that the detached house was the primary object of New Zealand architecture. The house was mythologised with respect to truthful use of materials, and the 'frank' or 'straightforward' articulation of those materials. Straightforwardness, taken to be a characteristic of european settler houses, was believed to have been lost through a Victorian 'fall from grace'.

Following Bill Wilson's declaration in 1948 that there was no architecture in New Zealand, Group Construction's First House directly re-enacts an originary
architecture. It is structured almost as closely as possible to Laugier’s drawing, consisting of a series of vertical posts, a top plate, and angled rafters. And like Laugier’s drawing, the joints are downplayed to the point where the entire structure appear simply to be resting together. The structure is lightly pinned with nails - there are no visible plates or bolts. The vestigial ridge-beam is notched into the rafters, but this is the most intricately expressed structural detail. The rhetoric of the straightforward joint accompanied a Rousseauist social picture of detachment and self-possession. The New Zealand house was associated with a first, pioneering human gesture, immersed in nature, but essentially opposed to it. The pioneer was an individualist, a man alone, independent, socially detached.

This social and constructional primitivism is still a dominant heritage in New Zealand architecture, although Mitchell wrote in 1984 that the "man alone has outstayed his welcome" and Clark and Walker have indicated the need to "rethink the rhetoric which surrounds such images." As the population of New Zealand increases and diversifies, the mythical pioneer is becoming an increasingly distant figure, inadequate for present conditions. Think, for example, of the so-far-inept handling of the vast increase of inner-city inhabitants in New Zealand's major cities. The question of the crowd and the multiplicity have not been adequately raised here.

We are not drawing a merely metaphorical connection between social and material realms here. The social and the material, if we follow Tarde, can only be distinguished in the most general and provisional of senses. Theories of the crowd represent a sophisticated body of thought regarding the aggregation of complex uniities which has been underexploited.