

Contagious Affectivity.

The Management of Emotions in Late Capitalist Design

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I am investigating the notion of affect as elaborated by Baruch Spinoza and, drawing from Spinoza, also by Gilles Deleuze and Brian Massumi, who have written extensively about this subject in relation to the constitution of subjectivities. The general framework I am following is given by the critique of current forms of capitalism, which I am inclined to rename semio-chemio-neuro-affective capital. This term underlines the coagulation of different levels of production, reproduction and control concerning regimes of signs, circulation of knowledge and affects, language and desire, the chemical and neurological composition of subjectivities and so on. I see here a progression from my previous work on how the production of subjectivities within a biopolitical/affective framework is mediated by psychopharmaceutical technologies (Marenko 2009a) and on the emotional entanglement that characterizes our relationship with objects, which I have reframed within a neo-animist paradigm (Marenko 2009b). I argue that we cannot look at design

without first addressing how emotion itself is being designed as labour within the current new spirit of capitalism. In this sense the increasing emphasis on emotion in design reflects and reinforces what is currently at the core of late capitalism, that is, the shift to affect, knowledge, information and experience, what Italian Marxist theorists (Maurizio Lazzarato, Christian Marazzi, Antonio Negri, Paolo Virno) define as immaterial labour. Against this backdrop I refer to Eva Illouz's notion of emotional capitalism and Bernard Stiegler's ideas of psychopower and the capture of attention, as well as to Deleuze's ideas on modulation and control. My intention in this paper is first to map the territory of what we mean by affect, as distinct from emotion (Deleuze, Massumi). The notion of an affective turn in the social sciences will be addressed (Patricia Clough). Then I will look at the transmission of affect (Teresa Brennan) by invoking an epidemiology paradigm (Gabriel Tarde) and ideas of social contagion and viral spreading. Finally I will position these ideas in relation to designed objects and the process and practice of design, specifically in relation to what is known as emotion-driven design.

The constitution of a psychopolitics reaffirming itself as a noopolitics through the technologies of the spirit is the major stake in a reorganisation of capitalism (Stiegler 2008)

Marketing is now the instrument of social control (Deleuze 1995)

People love to entrain (Thrift 2008)

Introduction

My intention here is to problematize the relationship between design and emotion by suggesting a framework based instead on the idea of affect. I argue that any discussion on design should be firmly placed within the wider framework of the current transformations of late capitalism and its concern with modes of control of, and engagement in, the affective sphere. This means reconsidering the production of value as inherent to life itself and its potential for experi-

ence, entertainment, emotion and enjoyment. A key point is that value is now extracted from, and created by, the interception, modulation and mining of pre-individual affective capacities.

My reflection on the field of design and emotion aims at both unpacking its ideological underpinning and locating it firmly within the above described broader affective realm. I would like to start from the premise that *all* design has to do with intensities and affects circulating among the stakeholders: objects, designers, users, as well as contexts. This position is predicated upon the central tenet that designed objects are always meaning-making machines and the emotions elicited cannot but be intrinsically and utterly relational.

Critique of the current view of design and emotion

The current literature on the relationship between design and emotion, a research field formalized in 1999 with the First International Conference on Design and Emotion (Delft University of Technology) and the foundation of the Design and Emotion Society in the same year, is rooted in a cognitive and functionalist approach and seems driven by the intention to define, categorize (Jordan 2000), and quantify (Desmet 2004) emotions. This has generated some interesting outcomes, but also some equally interesting and eloquent criticism (Demir 2008, Kurtgozu 2003, Savas 2008, Yagou 2006). The main critique is that the prevailing framework is reductionist as it focuses on a narrow understanding of emotions, products and users, as if emotions were something extra that can be *designed into* a product as an added value, disregarding the fact that emotions are always context-based and, as said above, utterly *relational*. Furthermore, within the field of design and emotion there seems to be a general agreement on the fact that, far from being understood and distinguished from other states, emotions are elusive, intangible and difficult to define (Desmet 2004, Desmet *et al.* 2008, McDonagh *et al.* 2004).

Donald Norman (2004) is one of the few who distinguishes between affect and emotion. While affect is what gives us the capacity to discern and make judgements for our survival (and includes emotions), emotion is «the conscious experience of affect, complete with attribution of its cause and identification of its object» (Norman 2004, 11). Elsewhere (Desmet and Hekkert 2007) the terms «affect» and «experience» are used interchangeably, underlying the fact that any product experience is inherently affective.¹ This seems to be a contentious issue, as all design can be said to be ultimately about eliciting emotional response. In this light, even the modernist narrative, often represented as predicated upon lack of emotion, is revealed as a machine-based fiction eschewing its complex affective engagement with the user (Yagou 2006). Another point has to do with the narrow, even trivial, concerns of the design and emotion field, which seems myopically and stubbornly engaged with measurement and taxonomy (Yagou 2006). Indeed, even though Pieter Desmet acknowledges that «the emotional aspects of a design can be difficult to discuss because they are often based on intuition» (Desmet 2004, 121); that «little is known about how people respond emotionally to products and what aspects of design or

¹ Desmet and Hekkert use the model of Core affect theory to map the multifaceted range of experience emerging from user-product interaction, which includes subjective feelings, behavioural reactions, expressive and physiological reactions.

interaction trigger emotional responses» (Desmet 2004, 111); and that it is «surprisingly difficult to come with a solid definition» for emotion (Desmet 2004, 112), he has elaborated a well-known method of measurement.²

Finally, the design and emotion field postulates a hierarchy of consumer needs (inspired by Maslow's hierarchy of needs). Jordan (2000), for instance, argues that following the satisfaction obtained at a functional level, «people will soon want something more: products that offer something extra; products that are not merely tools, but living objects that people can relate to; products that bring not only functional benefits but also emotional ones» (Jordan 2000, 6). This point reinforces the assumption that, as products become increasingly similar in technical terms and performance, the only way to distinguish them in a crowded market is by eliciting emotional and experiential responses (Desmet 2004, Norman 2004). However, as Savas (2008) has shown, this is grounded on a disassociation between emotions and fulfilment of needs which does not take into account the complex variability of material and social conditions of existence, surely affecting the emotional engagement with, and responses to, the world of designed objects. This divorce between emotions and functions risks to thin out the design and emotions debate and turn it into another market-driven catchphrase for the elite consumption of luxury commodities.

To sum up, the notion that emotional value can be added to a product to increase its appeal is unconvincing, as it does not account for the affective sphere within which emotions are produced and circulate. Moreover, it fails to consider the extent to which affects enter into the composition of subjectivities which are continuously negotiated in relation to the encounters with human and non-human agencies (objects, bodies, people, events, things). In other words, emotions cannot be located *in* objects. Rather, they emerge out of the very relationality among stakeholders and the variable contexts involved. This is also the position of sociologist Sara Ahmed (2004) for whom emotions are first and foremost relations (hence belonging to neither the subject nor the object), which, literally, shape our bodies by leaving the traces of their passage imprinted onto our corporeal surface.³

The same can be said of experience. If experience is an always emerging, negotiable, contingent, situated relation, this implies that «we cannot design an experience. But with a sensitive and skilled way of understanding our users, we can design *for* experience» (Wright *et al.* 2004, 52).

I would argue that probing into notions of affects could offer significant benefits to any investigation on design. In what follows, I address the philosophical roots of affect and outline a discussion of the circulation of affects in contemporary capitalism.

The affective turn

In his introduction to «The Affective Turn» (Clough 2007) Michael Hardt considers the current interest in affect found in critical theory. Tellingly, the title of

² PrEmo (Product Emotion Measurement), a non verbal self-report instrument based on cartoon faces that measures 14 emotions often elicited by product design (Desmet 2004, 114).

³ Ahmed's work on the relation between emotion, body sensation and cognition draws from Descartes, Hume and James. The idea that emotions are tied up mainly to bodily sensation is also argued by neuroscientist Antonio Damasio. He says: «emotions play out in the theater of the body, feelings play out on the theater of the mind» (Damasio 2003, 28). Hence, while emotions are actions or movements, feelings are always hidden.

his essay asks precisely what affects are good for, and in so doing offers indications as to the possible links between this (renewed) interest in the affect-scape and various other, including, I argue, design, which would benefit from being reconceptualised through the framework of this paradigm. What is certain is that the relevance of affects in contemporary media, art and critical theory is growing (Clough 2007, Massumi 1996 and 2002).

One of the most radical aspects of the centrality of affects concerns the synthesis it requires. Affects engage body and mind, reason and passions. They have to do with «both our power to affect the world around us and our power to be affected by it» (Hardt, 2007 ix). Spinoza is the philosopher whose voice inspires and reverberates in the current concern with affects. It is to Spinoza that we should turn to investigate affect and, more generally, the relationship among bodies, objects and power. His claim that there exists a parallelism between body and mind, reason and passion, problematizes the way in which their relationship is thought of. In other words, it must be acknowledged and taken into account the correspondence between mind's power to think and body's power to act. Affects straddle the continuum of their relationship, indicating the current state of mind *and* body.

The scholar of passions, which he investigates with a rigorous geometrical method, as if they were lines, surfaces and bodies,⁴ Spinoza never actually mentions emotions or feelings using instead the word affect (from the Latin *affectus*) to describe passions. He makes an important distinction between affections and affects. While affections are states of the body (effects of a body upon another body), affects are variations of the power of the body (effects of affections upon a duration).⁵ So affects are first and foremost «the trace of one body upon another» (Deleuze 1988, 138), exactly as a body casts its shadow on another, and we can infer them both because of this shadow. But affects are also the ensuing variations in power from one state to another. This means that power and affectivity are strictly linked. Power is indeed «what opens up the capacity for being affected to the greatest number of things» (Deleuze 1988, 71). Finally, affective states are vectors each corresponding to a specific kind of knowledge and mode of existence.

For Spinoza, it is all a matter of encounters: an encounter is good when my relations are compounded and my powers increase (e.g. food); an encounter is bad when my relations are dissolved and my powers decrease (e.g. poison).⁶ Any encounter is therefore always the encounter between different horizons of affectivity, that is, different states of transition in the power of bodies. Following Latour's notion of non-human agency (Latour 2005), we must intend these encounters as occurring among human and object.

It is precisely this philosophical framework that allows us to reconceptualise the relationship we entertain with the material world as affect-based. If on one

⁴ See *Ethics*, III, 83.

⁵ For Spinoza, affects are «the modifications of the body by which the power of action of the body is increased or diminished, aided or restrained, and at the same time the ideas of these modifications» (EIIIDef3: 83).

⁶ Good and bad are «the two senses of variation of the power of acting: the decrease in power (sadness) is bad; its increase (joy) is good» (Deleuze 1988, 71).

hand this can help us to disentangle and clarify the often confused definitions of affect and emotion, of which more later, on the other it also intends to locate the production and circulation of affects together with the production of the «immaterial» (codes, information, ideas, cognitive and creative labour) and to ground it within the broader perspective of postfordist forms of life. Thus, a reflection on the role of affect in the material world of designed objects concerns the epistemological shift from an economy of production and consumption to an economy based on the circulation of affects or intensities within the domain of biopolitical control. Indeed, any discussion of design, empathy and emotion should be placed within an affective theory of late capitalism (semiochemio-neuro-affective capital), an «almost fragile mode of social organization, the perpetuation of which depends on the existence of hospitable life forms (e.g. bodies, subjectivities, social relations, material processes, desires, and fantasies)» (Vrasti 2008). Philosopher Brian Massumi warns:

The ability of affect to produce an economic effect more swiftly and surely than economics itself means that affect is a real condition, an intrinsic variable of the late capitalist system, as infrastructural as a factory. Actually, it is beyond infrastructural, it is everywhere, in effect. Its ability to come secondhand, to switch domains and produce effects across them all, gives it a metafactorial ubiquity. It is beyond infrastructural. It is transversal. This fact about affect –its matter-of-factness needs to be taken into account in cultural and political theory. Don't forget. (Massumi 2002, 45).⁷

The difference between affect and emotion

As Massumi (2002) has remarked, we lack a consistently specific cultural and theoretical vocabulary to describe affect, too often used – wrongly – as a synonym for emotion.⁸ While emotion is a subjective, qualified, recognisable intensity, «the socio-linguistic fixing» (Massumi 2002, 28) of a personal experience, affect is instead unqualified, pure intensity, neither ownable nor recognizable or measurable. Affect is the unactualized *capacity to affect* and be affected.⁹ Affect is a pre narrative, preindividual intensity, akin to chaos theory's critical point when «a physical system paradoxically embodies multiple and normally mutually exclusive potentials, only one of which is «selected»» (Massumi 2002, 32).

To say that affect is a preindividual intensity means to shift from a subject-cen-

⁷ It must be remembered that the non-rational has always been part and parcel of capital. Thrift (2008) mentions Keynes' infamous «animal spirits» – «contagious spirits like confidence, fear, <irrational> exuberance, bad faith, corruption (...) and the very stories we tell ourselves about our economic fortunes», as «powerful psychosocial forces», which, however, have been ignored albeit with a few exceptions (Keynes, Pigou, Mill, Bagehot).

⁸ Chapman (2009) addresses the issue of emotional durability as a possible, if yet untested, solution to the issues of in-build obsolescence and a Kleenex-culture of disposability. His argument of a lack of a specific language of emotional durability both in academic and industry circles echoes Massumi's point of a lack of a specific grammar for affect.

⁹ Manuel DeLanda (2002) makes explicit the connection between this notion of capacity and Gibson's notion of affordance, indicating a potential capacity of an object, different from intrinsic properties and actualized only in relation to specific context. For instance, a piece of ground whose capacity of affording support to walking creatures is not another intrinsic properties, rather one that emerges only in relation to the presence of said creature. Furthermore, affordances are exquisitely symmetrical insofar as they express both capacities of affecting and being affected.

tred theory to an affect-based one, where the subject as we knew it is no longer a founding entity, but what counts are ceaselessly coagulating and dissolving waves of affective states around which the negotiable fictions of the «I» gather and are verbalised. As the point of emergence, assemblage and coexistence of different levels,¹⁰ affect is first and foremost immanence, that is, it is manifest in the material world. Therefore, it has to be experienced, and experimented upon. Deleuze remarks upon this point when he says: «No one knows ahead of time the affects one is capable of; it is a long affair of experimentation» (Deleuze 1988, 125).

This virtual, unactualized aspect of affect is significant insofar as it helps to clarify the distinction between emotion and affect. While affect is autonomous and openness to the possible, emotion is the most contracted expression of affective capture. Else said, affectivity is a force that possesses a material and energetic dimension (i.e. affects increase or decrease the power of the body, they enhance it or deplete it), it is a flow of intensity that mediates the relationship between the pre-individual and the individuated (Virno 2001, 78).¹¹

I now turn to investigate the general framework provided by theories of postfordism and late capitalism. Here, too, the prevalence of an affect-based register is found in the work of several theorists (Clough 2007, Hardt 1999, Illouz 2007, Lazzarato 2006, Massumi 2002, Stiegler 2010, Thrift 2006, 2008, Vrsti 2008).

Sociologist Eva Illouz's notion of «emotional capitalism» describes «a culture in which emotional and economic discourses and practises mutually shape each other, thus producing (...) a broad, sweeping movement in which affect is made an essential aspect of economic behaviour and in which emotional life – especially that of the middle classes – follows the logic of economic relations and exchange» (Illouz 2007, 5). For Illouz the process of managing and giving names to emotions (against their volatile nature) has engendered an «emotional ontology», that is:

The idea that emotions can be detached from the subject for control and clarification. Such emotional ontology has made intimate relationships commensurate, that is, susceptible to depersonalization, or likely to be emptied of their particularity and to be evaluated according to abstract criteria. This in turn suggests that relationships have been transformed into cognitive objects that can be compared with each other and are susceptible to cost-benefit analysis (Illouz 2007, 36).

Terminally disjointed from the social, material, cultural and human context responsible for their emergence, emotions become quantifiable, countable, and discrete – objects that can be traded and exchanged.

¹⁰ Although these levels may be described in terms of body and mind, depth and surface, action and reaction, they should not, however, be intended as binary oppositions, but as «resonating levels» (Massumi 2002, 33).

¹¹ See Simondon (2001).

Capture, domestication and saturation of affect

Here it might be relevant to refer to philosopher Bernard Stiegler's work, which focuses on a critical analysis of mediatic capitalism as directly affecting the spiritual life of the individual, namely the life of the brain itself, via an affective saturation and destruction of attention, taken as particular instances of the destruction of libidinal energy. Stiegler (2008) defines «capture of attention» as a globalised phenomenon of «synchronised and hyper-realist collective hallucination» that produces a syndrome of cognitive and affective saturation.¹² This systematic capture of attention is one with cultural capitalism and is made possible by a plethora of psychotechnologies. What is interesting in Stiegler's perspective is not only that the framework is no longer a biopower controlling producers, but by a psychopower controlling consumers. Rather, it is the set of modalities through which this process takes place to be significant for our reflection on design. Among the psychotechnologies enlisted by cultural capitalism toward the creation of spaces of affective capture we find self-help literature and the advice industry (Illouz 2007), soft-power geopolitics, pharmaceutical industries and psychopharmaceuticals,¹³ storytelling-based marketing, experience economy, preferences listing and, crucially, emotion-driven design.

As Nigel Thrift (2006) remarks in his lucid analysis on new forms of consumption: «For some time now, there have been attempts to extend the signature of the commodity, both by enlarging its footprint in time and by reinforcing its content, most especially by loading it with more affective features» (Thrift 2006, 286). Certainly commodities are being stretched, dilated, swelled. However, as I am trying to argue throughout, this process does not involve «loading commodities *with* affective features» as much as turning them into triggers *for* an increasingly unmitigated affective experience. This dilation of the experiential factor, or unlimited offer of pre-packaged intensities, must be read, however, as the ultimate dispositive of abolition of the experience *tout court* (Consigliere 2010).¹⁴

Among capitalistic modes of harnessing cognitive and non-cognitive (affective) competencies, Thrift (2006 and 2008) discusses sensory branding, *buy-ology* and neuromarketing techniques aiming at unlocking buyers' secret needs and desires by working either on measuring their brain activity and its correlation with the propensity to buy; or else, by implementing a socio-cultural re-engineering of consumers' mind involving the whole of their sensorial/affective realms.¹⁵ We are now well beyond sensorial branding. We are

¹² On the relation between new economy and attention deficit see also Marazzi (2008).

¹³ On the triangulation among visual discourse of psychopharmaceuticals, design and the production of subjectivities see Marenko 2009.

¹⁴ Stefania Consigliere's essay draws from Isabelle Stengers and Philippe Pignarre (2005) *La sorcellerie capitaliste. Pratiques de desenvoutement*, Le Decouverte, Paris. For Stengers capitalism in itself is a system of sorcery, whose modes of capture (against which we have no protection) include, I argue, emotion-driven design.

¹⁵ With the term «neuromarketing» we intend a new field of research at the crossroad of psychology, science and marketing, which employs brain scanning techniques such as fMRI (functional Magnetic Resonance Imaging) that by detecting the amount of oxygenated blood in the brain can visualize areas as little as one millimetre where brain activity flares up. Neuromarketing is «only one small aspect of the larger neuroeconomy that includes the psychopharmaceutical industry, the neurological products themselves (...) the financial services, the marketing companies, the consumers and, lastly, its own financial index»

now in the empire of *worlding*, i.e. the creation of meaningful worlds engendered by a strategic modulation of flows and waves of affects.

I argue that emotion-driven design should be located within this framework in order to understand its implications and the (ideological) rationale underpinning its endeavour. Emotion-driven design, like psychopharmaceuticals or neuromarketing, belongs to an ongoing restructuring of the relationship between subjectivities and capitalism, mediated by patterns of consumption, experience, lifestyles, moods, in short, by affect. Emotion-driven design has to do less with design and more with the social and cultural monitoring of affectivity. Emotion-driven design has to do, ultimately, with new, pervasive, strategies of biocontrol.

We must be careful, however, not to confuse social critique with paranoia.

The target of control is not the production of subjects whose behaviours express internalized social norms; rather, control aims at never-ending modulation of moods, capacities, affects, and potentialities, assembled in genetic codes, identification numbers, ratings profiles, and preference listings, that is to say, in bodies of data and information (including the human body as information and data) (Clough 2007, 19).

In his famous and prescient *Postscript on Control Societies* (1995) Deleuze wrote that control operates on, and equates with, modulation of moods, access codes, passwords.¹⁶ The object of modulation is life and living being, and it is through the control of modulation that biopower is exercised. Philosopher Maurizio Lazzarato (2006) draws on Deleuze when he writes:

The capture, control and regulation of the action at a distance of one mind on another takes place through the modulation of flows of desires and beliefs and through the forces (memory and attention) that makes these flows circulate in the cooperation between brains. In modulation, as a modality of the exercise of power, it is always a question of bodies, but now it is rather the incorporeal dimension of bodies which is at stake. The societies of control invest spiritual, rather than bodily, memory (contrary to the disciplinary societies) (Lazzarato 2006, 185).

These dispositives of control and the new relations of power that operate by capturing memory and attention take the name of *noo-politics* (Stiegler 2008). «If disciplines moulded bodies by constituting habits mainly in bodily memory, the societies of control modulate brains and constitute habits mainly in spiritual memory» (Lazzarato 2006,186). In other words, we can say that affects, language, knowledge and life itself are taken as productive, engendered and exploited.

(Abi-Rached 2008, 1160). See Senior, C. and Lee, N. (eds.) (2008) *Journal of Consumer Behaviour*. Special Issue: Neuromarketing, Volume 7 Issue 4-5, July - October.

¹⁶ Deleuze defines modulation as such: «controls are a modulation, like a self-transmuting molding, continually changing from one moment to the next, or like a sieve whose mesh varies from one point to another» (Deleuze 1995, 179). Tellingly, we encounter discussion about moods also in texts about branding of places and third places. See Klingmann 2007 where alongside performance, appeal and impression, differentiation and seduction are listed as the criteria that make up a strong personality in architecture.

Focusing on how to define the singularity of relations of control, Lazzarato's analysis of the transition from disciplinary societies to societies of control invokes Gabriel Tarde to find an answer. Tarde, whose work is undergoing a slow but consistent rediscovery in the field of humanities and social sciences (see Deleuze and more recently Latour), was one of the most influential 19th century French sociologists. Fierce opponent of Emile Durkheim, Tarde refutes Durkheim's notion that society is always greater than the sum of its parts, an idea he considers a mystical abstraction. On the contrary, Tarde maintains that the whole is always *inferior* to the parts. Moreover, and essential for an understanding of the role of affects in late capitalism, Tarde had the radical intuition that economy as such rests on a core of beliefs and desires, what he calls «passionate interests». Finally, his understanding of society as epidemiological, i.e. based on the idea that affects spread like epidemics, is of the utmost relevance to this paper.

However, my concern lies not much on the critique of postfordism outlined above, as on the extent to which we can use it to analyse our relationship with the designed object. To do this, let us examine the way affects spread, how they circulate among bodies and what traces they leave of their passage. And what affects *do*.

On contagionology

Again, it is to Tarde's micro-sociology of contagious repetition and imitation that we refer. He says:

... it is nevertheless true that ... belief and desire bear a unique character that is well adapted to distinguish them from simple sensation. This character consists in the fact that the contagion of mutual examples re-enforces beliefs and desires that are alike, among all those individuals who experience them at the same time ... we no longer have epidemics of penitence ... but we do have epidemics of luxury, of gambling, of stock-speculation, of gigantic railroad undertakings, as well as epidemics of Hegelianism, Darwinism, etc. (Tarde 1903 in Lazzarato 2006).¹⁷

Thrift (2008) draws on Tarde to discuss the socio-biological nature of processes of contagion and imitation according to which affects circulate within an ecosystem. He argues for a biology-based account of economies and human societies, or at least one where biology and culture might be considered in equal measure. Perception, cognition and action are not separate realms. The world of experience has neurophysiological foundations. Experience (and even history itself) can be reframed as swashes of hormones «which constantly operate on what are remarkably plastic brain synapses through the medium of cultural amplifiers like caffeine, sentimental novels, pornographic works, and all manner of consumer goods» (Thrift 2008, 88).

If material culture is but an extension of human cognition (and not its reflection), this means that its evolution is actively shaping human intelligence. Take

¹⁷ The end of the 19th and the beginning of the 20th century witnessed a great interest in crowd behaviour and psychology: the idea of a group mind affecting (often irrationally) a crowd was taken for granted (e.g. Gustave Le Bon's notion of social contagion in *The Crowd: A Study of the Popular Mind*, 1896)

for instance the media, argues Thrift, and their increasing power in propagating psychosocial forces, such as identification of populations/audiences, data mining, new forms of demographics (everyday metrics like hits, social networking sites and so on). They are creating new sources of reflexivity where audiences' responses are interpreted as a combination of technology, imitation and the «swash and swirl of affect» (Thrift 2008, 84).

A different viewpoint is argued by the late Teresa Brennan (2004), whose theory of transmission of affects states «the opposite of the sociobiological claim that the biological *determines* the social. What is at stake is rather the means by which social interaction shapes biology» (Brennan 2004, 74). For Brennan, the circulation of affects alters anatomical makeup – an anti-neo-Darwinist idea if ever there was one. Not only is the transmission of affect socio-psychological in its origins, it is also responsible for bodily changes, as it modifies the biochemistry and neurology of the individual.

Brennan points out how «in a time when the popularity of genetic explanations for social behaviour is increasing, the transmission of affect is a conceptual oddity. If transmission takes place and has effects on behaviour, it is not genes that determine social life; it is the socially induced affect that changes our biology» (Brennan 2004, 1).¹⁸ In other words, the transmission of affect is a process «social in origin but biological and physical in effect» (Brennan 2004, 3).

Thus, intensities spread by contagion: a viral infection that travels through assemblages, a series of psychogenic epidemics (e.g., chronic fatigue syndrome, attention deficit hyperactivity disorder, depression) that engulfs corporealities via images and mimesis, smells and auditory factors. It remains unclear, however how this process actually takes place. For Brennan, even the definition of psycho-epidemics does not tell us «how a social and psychological affect buries itself within or rests on the skin of an utterly corporeal body» (Brennan 2004, 3).

I wonder whether we could use these ideas on the transmission and dissemination of affect to suggest an epidemiological map of how the spreading of intensities is co-opted and monitored by a semio-chemio-neuro-affective capital and, more to the point, why should design pay attention. What Karl Palmas (2009) with fortunate expression calls 'Tardian contagionology' ought to be understood in the context of a daily life increasingly mined, monitored and recorded by psycho-technological devices. Our probable future is rendered, made visible and foreseen by new modes of surveillance (social monitoring, predictions of behaviours, mapping of patterns of consumption and so on). However, to define these apparatuses as surveillance is perhaps reductive. Rather, these technologies are forms of *entrainment* whereby one person's affects are linked to another by chemical, olfactory, rhythmic and hormonal means. Entrainment is the process by which «one person or group's nervous and hormonal system are brought into alignment with another's» (Brennan 2004, 9).¹⁹ Hence, the creation of ad-hoc publics. Again, we find Tarde uncannily prescient on this regard.

¹⁸ Brennan argues that this idea encounters resistance, as the individual is still assumed as being emotionally independent, affectively self-contained and owning his/her own emotions.

¹⁹ One instance is chemical entrainment which works mainly by smell - unconscious olfaction (i.e. pheromones, molecules that communicate chemical information concerning aggression or sex).

Publics

At the end of the 19th century, when the societies of control begin to elaborate techniques and dispositives, Tarde explains that the «social group of the future» is neither the crowd, the class, nor the population, but the «public» (or rather publics). By the public, Tarde understands the public of the media, the public of a newspaper: «The public is a dispersed crowd in which the influence of minds [esprits] on one another has become an action at a distance» (Tarde 1989:17 in Lazzarato 2006, 179).

If it is important to reflect on this notion of «publics» expressing the new subjectivities that characterize control societies as among the public, invention and innovation spread almost instantaneously «like the propagation of a wave in a perfectly elastic milieu» (Tarde 1989, 38), in a broader sense this has to do with the range of affective competencies increasingly demanded and mobilized by the semio-chemio-neuro-affective capital so to «ensure the *spontaneous* and *enthusiastic* participation of individuals» (Vrasti 2008). Thus, we can talk about a capillary micro-distribution of governance that affects intimate lives, desires, modes of conduct, social relations, lifestyles aspirations, feelings – in short, the spectrum of our affective sphere. The personal is governed. Affective literacy has become a prerequisite for an economically proficient participation in neoliberal economies. To use Thrift's eloquent expression: «affect brings together a mix of hormonal flux, body language, shared rhythms and other form of entrainment to produce an encounter between the body (understood in a broad sense) and the particular event» (Thrift 2008, 236).

In this sense, consumption itself is nothing but a «series of affective fields» (Thrift 2006, 286). Waves of affects surge and circulate where intuition and habits are distributed over small slices of time, presiding over the encounter with the commodity, clearly influencing consumption patterns by affectively binding consumers. To tap into this affective milieu the industry that investigates consumers' wants and needs is even more forcefully employing neuro-aesthetics (the study of the neural basis of artistic creativity and experience) as well as neuromarketing. The aim is to produce a «rapid perceptual style which can move easily between interchangeable opportunities, thus adding to the sum total of intellect that can be drawn on» (Thrift 2006, 286). The point is to swiftly mobilize new structures of thought, to rewrite experiences as commodities, to immerse the relationship between consumer and object in the amniotic fluid of a market-driven emotional prosthetics.

One example of this is the active and vocal involvement of consumers via any user-generated social media platform, where the capture of enthusiasm is co-opted and deployed in what could be described as an ongoing beta test (for instance, Amazon preference listings). Another example is the continuous expansion of the resonance of commodities, whose stickiness stretches out through sensory design (smells, noise, aromas, texture) and through «extended architectures of onflow, designed as a process in order to capture process» (Thrift 2006, 295).

What is the connection between the types of social relations and subjectivities emerging from, and required by, this specific formation of capitalism and the realm of design? Can it be argued that (some of) these competencies are shaped

by, and surface from, the encounter with designed objects? How can our encounter with the commodity be reconfigured to account for such contagious affectivity? Finally, what are the emotional pressure points that trigger waves of affect to act like glue between consumer and object via consumption?

Many questions, with no claim to provide answers. Only some indications of where those answers might be found: for instance in the shifting boundaries between 'prosumption' and 'hacking', where the encounter with the commodity is reconfigured not only by making consumption and production closer, but also by a power transfer into the competences and inventiveness of users.²⁰

Conclusion

This paper started with a twofold ambition. First, it aimed at engaging critically with the landscape mapped out in so much of the current design and emotion literature arguing instead for the necessity of an affective turn. Second, it attempted to do so by reframing the issue of emotion-driven design within the broader framework of late capitalism.

If it is true that design is always concerned with future behaviours, with inscribing into matter a realm of possibilities, with offering a potential map of the immediate future and its events, it will also be true that any theoretical resource that can capture, even partially, these realms, should be a welcome addition to the tool-box of the thinking designer, especially if it can offer ways to analyse, explain and predict patterns of consumption, and the swerves of affect emerging in the encounters with objects. Ideas concerning the formation of public and audiences, the rendering of future forms of interaction, and the way in which affects spread should certainly be of interest.

When we address not only the way human experience itself is being rewritten, but also what counts as experience; when we look at ways in which affectively controllable environments are engineered; when, finally, we understand the spreading of influence and affect via forms of mimetic desire, imitation, in short, via viral models of contagion, we have on our hands theoretical tools to map what, with fitting expressions, Thrift describes as the 'geography of what happens' and 'speculative topography'. Theory is nothing but a diagnostic tool, a way of asking questions – both a 'quest and a questioning', rather than a way of suggesting answers. And design, if we want, can be at the forefront of this process.

²⁰ See Alvin Toffler's influential 1980 book *The Third Wave* and Scott Burnham's well known pamphlet (2009).

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