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How to cite:

McFall, Liz; Cochoy, Franck and Deville, Joe (2017). Introduction: Markets and the Arts of Attachment. In: Cochoy, Franck; Deville, Joe and McFall, Liz eds. Markets and the Arts of Attachment. CRESC: Culture, Economy and the Social. Abingdon: Routledge.

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Version: Accepted Manuscript

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Introduction: Markets and the Arts of Attachment

Liz McFall, Joe Deville, Franck Cochoy

One story sociologists and political economists tell about marketing is that it manufactures desire for things that people would not otherwise want. As Karl Marx (1980) famously explained, products get their finishing touches only in consumption. Marketing is an integral part of the distribution of action that defines production and consumption by orchestrating markets. As practiced in the wild marketing also concerns the build, design, pricing and placing of the thing itself. This means that markets and marketing are in it together and that people are *in* their products from the start. In this Introduction we outline what we mean by the ‘arts of market attachment’ using the motif of the Apple Watch before introducing how our various contributors make sense of the arts and devices of markets.

One of the best known stories sociologists and political economists tell about marketing is that it manufactures desire for things that people would not otherwise want. This is quite correct at one level but it is blandly tautological at another. Karl Marx (1980) knew better in the *Grundrisse* when he made his famous argument that a railway with no passengers is only a railway in prospect. Products, Marx explained, get their finishing touches only in consumption. Marketing is an integral part of the distribution of action that defines production and consumption by orchestrating markets. It is not, at least not only, the pretty lies of paid advertising, organized flash mobs and viral campaigns. As practiced in the wild and taught in business schools everywhere, marketing also concerns the build, design, pricing and placing of the thing itself. This means that markets and marketing are in it together, as the work presented in Araujo, Finch and Kjellberg (2010) so painstakingly pointed out. By careful extension this also means that people are somehow *in* their products from the start.

There is an uncanny temporal logic in this argument. If a product is a product *only* in consumption what we are saying is that the consumption of marketed goods happens only when the arts and enterprises of marketing have successfully incorporated people, their prospective markets, within production. Marketing then is not an after the fact add-on, giving products the illusion of desirability - it can be found in the whole apparatus of production and consumption. This argument owes a great deal to earlier work that followed science, technology and markets across networks and actors.¹ What we aim to do in this collection is take this a little further by exploring markets as the outcome of various arts and devices of attachment that work with the avid propensities of all entities to associate.

Markets work with avidity. This is to say something more than that they work through promoting greed – though they often do that too. What we mean by working with avidity is working with the propensity to ‘have’, that is, to associate, to relate, that can be found in all but the most inert entities. Markets proliferate attachments and attachments proliferate in markets. Antoine Hennion famously claimed ‘attachment’ for sociology as a term that signalled the dual action of relationship building.² Attachment, as he explained, is oriented towards the creation of both objective ties- attachment as a material link- and subjective ties- attachment as an affect, feeling or sentiment

Instead of measuring relations between elements considered as fixed, determined — cultural practices on the one hand, their practitioners, characterized by different variables, on the other — we have to reflexively question, from the amateur experience, how these relationships are formed, and how they are changing both the things valued and the people valuing them. This is why we prefer to talk about attachments. This beautiful word breaks the opposition between a series of causes that would come from outside - and the here and now of the situation and interaction. As for the amateurs, attachment insists less on labels and more on the state of persons; on the side of the works and tasted objects, it leaves open their right of reply, their ability to co-produce “what is happening”. (Hennion, 2004: *Hennion’s translation*).

In fact, attachment and avidity are inseparable. As Cochoy (2012; 2005) has pointed out in earlier contributions to this debate, from the perspective of certain, influential strands in sociological thought, the idea of market ties or attachments, seems counter-intuitive, almost oxymoronic. Surely, markets work to dissolve social ties so that atomised individuals can exchange freely without obligations to one another? For better and for worse, it is purported to be thanks to the market that we are able to free ourselves from exclusive, dependent relations and benefit from an infinity of choice. It is thanks to the market that we are deemed no longer united but alone, isolated from each other, subject to the competition of all against all. This idea (or ideal) of the market is also contained within the formalism of economic modelling, the same formalism, anthropologists among others object, that is always collapsing at the level of practice.³ It is an idea that has, nevertheless, been formative in critiques of market relations from Durkheim to Polanyi.

Our aim in this introduction, and in the chapters that follow, is to enlarge the frame of the audit. We move beyond what markets do to pre-existing social ties, to explore also how the varied arts and devices of attachment – including those algorithmically grounded innovations that are fast developing within digital economies – compose and orchestrate markets. This includes, but is not limited to, considering how recognisably social ties of love, family, community or solidarity fare in markets. Also in the frame are questions about how attachments of all kinds – sentimental, affective, aesthetic, corporeal, physiological, psychosomatic etc. – between people and things are worked into the arts and devices employed in markets.

In this sense, our project shares and pushes further the aims of Anne Schmidt and Christoph Conrad's recent book on *Affects, Bodies and Market Societies*. In their book, the authors review the role of affects in the development of "soft capitalism". The authors of the book show how the puzzling opposition between affects as the expression of an invariant biological substratum and affects as ever shifting historical constructs is solved through various efforts aimed at activating our affects, depending on the power relationship between supply and demand, cultural orientations and economic goals (Conrad and Schmidt, 2016). In the following pages, we elaborate on the same idea,

by stressing that the art of “emotion management” is not only oriented at shifting individuals’ inner states, but also at building ties with them and between them, hence deepening the social interconnections between people and economic realms and values. It is very important to stress that this process, far from being just top-down, from market professionals to ordinary consumers, often engages, and even sometimes starts from, the participation of lay people... including ourselves!

Inspired by Kjellberg’s model in this collection, we begin in this spirit with a short diversion into an auto-ethnography of the Apple Watch. As a product in the emerging category of ‘wearable’ devices -devices that work through physical attachment to users- made by a company legendary for strong consumer attachment, the Watch offers a fitting departure point.

Who is attaching who?: on wearing the Apple Watch

The launch of the Apple Watch, billed as the company’s most personal device ever, was announced in March 2015. For us, this launch and the market fate of the watch, was interesting for reasons which bear directly on our objectives in this collection. Apple is regularly ranked in the top five of the world’s the most valuable brands alongside the technology mega-corporations Google, Facebook, Microsoft and Amazon that increasingly structure what and how people buy⁴. Among these, Apple Inc. is a touchstone corporation, a shibboleth even, in the way it identifies and divides its followers and its critics. We editors are no exception to this. Perhaps the only Apple position we share is the view that the corporation offers an exceptional case-study in the arts of market attachment. For all its devout following, Apple has, particularly since the ascendance that began with the launch of the iMac in 1998, faced a steady stream of critique for employing the dark arts of imitation, reverse engineering, patent infringement, litigiousness, off-shore production, questionable labour practices, excessive shareholder value extraction, consumer platform lock-ins, anti-competitive practices and especially slick marketing⁵. It is the character, the features and qualities, of this slick marketing that make Apple, and its watch in particular, such an instructive case for a

collection exploring the arts and devices of how people attach to marketed goods (and how marketed goods attach to people).

One of us got attached in September 2015. She was always going to be the most prone. A long time Apple fan, wilfully offsetting beheld beauty and intuitive usability against those dark rumours and open source abuses, she would be the one to succumb. She was already accustomed to distributing her exercising self across another wearable device, a Fitbit with a 10000 step target-setting and sleep tracking function. But Apple's Watch was also thing of beauty, at least she reckoned the version cast in rose gold aluminium was. Unlike the Fitbit, which she tucked into underwear whenever she dressed up, the Watch could be worn with anything. 'Can't you just take that ugly thing off for the wedding?' she used to get asked. Well, no, she hadn't been willing to let all those steps go to waste, unregarded, uncounted. It was bad enough that, placed in underwear, the device counted far fewer steps than when worn on the wrist. In point of fact, wearable devices don't count steps at all. Tracking devices use three dimensional accelerometer systems to sense motion and motion intensity, which are then converted by algorithms into usable information rendered as 'steps'. Many of her steps are earned by typing angrily, even on one occasion, by an intense patch of turbulence. Developers are well aware of this - activity trackers for the wrist are significantly less accurate than those worn on the trunk, or on the head. But they are much more *wearable*. People have a well-established tolerance for wearing little machines on their wrists, not so much, as Google Glass discovered, for wearing them along the central line where they more accurately capture bodily movement.

This is a first hint at how people are already *in* products. Becoming a product that endures, that gets 'into'⁶ people, means fitting people, and their varied relations, into the product. As Cochoy (2016a) has described, in a different context, the innovator-producer is also, necessarily, a buyer. In the history/mythology of Apple, Steve Jobs occupies a position as the ultimate sovereign consumer, relentlessly pressing buttons to engineer and re-engineer user experience into the product. This distribution of producer/buyer/engineer/user/consumer relations is integral to the object's journey

to becoming a marketed product. In the Apple Watch, the user is present even in the decision to call the device a watch. Unlike 'wearable devices', watches are a recognizable, liveable product category. Being called a watch might help counter resistance to body-borne-machines among the many who are not 'early adopters' of technology, while at the same time hedging against the uncertain future of the 'wearable device' product category.

Yet Apple's Watch is no more a watch than any of the other trackers on the market with a time function are. It is more accurately described as a 'smart-watch', another new product category that signals that its 'watch-like' functions play second-fiddle to many other capabilities. For critics it's an overpriced, battery greedy activity tracker that has yet to define the really crucial problem that it solves. Others point to its lower discard rate than that of competing devices which are fast becoming famous for ending up in drawers⁷. Notoriously secretive, Apple Inc. are not saying how many watches they have shipped. If early estimates are correct though the watch is selling faster than the first generation of the iPhone and taking over from Fitbit as the 'stickiest' of wearable tracking devices⁸. This raises intriguing questions about the nature of attachment. What is it about Apple's Watch, with its high price and functional limitations, that might be making it stick, or attach, faster to its users?

The price itself could be a factor (see Cochoy in this volume). Products may be stickier when they cost more, providing more motivation to resolve any post purchase discomfort in their favour. But that is surely not all there is? There must be more in the attachment to Apple products to prompt those controversies about 'owned' consumers and cultish followings (Belk and Tumbat, 2006). Apple Inc. has certainly exercised unusual control through its development of multi-channel platforms that integrate content like software, music, video and apps with their hardware. Multi-channel platform integration locks consumers in 'by imposing high switching costs, as Apple content can only be played on Apple hardware' (Montgomerie and Roscoe, 2013: 293). It's a business model that provides operating synergies and a high level of influence over suppliers and customers. It also provides a device that helps to secure attachment, by making it possible to 'listen

in' to customer conversations (*c.f.* McFall, 2014). Apple's online iTunes and App stores give the company real-time access to lots of the things their customers are listening to, watching, reading, playing and working with. Its ranking and review systems aggregate this alongside the more detailed qualitative thoughts that customers share. As is the case with other tech giants, notably Amazon, this aggregate data is sorted using algorithms to produce sales 'rankings' or 'trends' that exert huge influence upon future purchases⁹.

Rankings are an important feature of attachment strategies in digital economies. At a glance, they appear to be measuring a straightforward data point, the number of purchases of a given product among all products, but, as Gillespie (2016: xx) explains, the process is 'bounded in oblique ways by timeframe, category, and other parameters determined by the platform, and fed back not just as information, but as an invitation to value that product because of its popularity'. Apple's Watch sits in an 'ecosystem' of devices that listen, sort, rank and value consumer habits, preferences and sentiments. Algorithmic ranking and trending devices provide a means of 'digitally objectifying' qualities (Mellet et al. 2014). These strategies of digital market attachment appear to push the boundaries of economics, scored, in Gabriel Tarde's terms, as a 'science of passionate interests'. They offer the capacity 'to calculate, with extremely sensitive mechanisms, the slightest mood variations' (Latour and Lepinay, 2009: 49) so that the kind of economic quantification of sentiment that Tarde aspired to, seems, through this proliferation of new valuation techniques (*c.f.* Kjellberg & Mallard, 2013; Helgesson and Kjellberg 2013), almost within grasp.

In this context of commercial digitization, 'listening-in' on prospective customers can claim to be looped back into production in a tighter temporal frame than imagined in most market models. The increased velocity of customer feedback and product adjustment cycles, particularly through user-generated online content, underscores the increasing prominence of co-production, co-creation and 'prosumption' in accounts of contemporary consumer capitalism (Zwick and Cayla, 2001; Ritzer and Jurgenson, 2010; also Mallard, Mellet, Gerlitz, this volume). Co-production plays a vital role in market attachment. The algorithmically powered valuation devices of digital retailing offer novel,

and consequential, means of putting what people bought, and what they thought about it, into the products they will buy next. And yet there has always been more than this going on when people attach to products.

In the end, it is not aggregated rankings and reviews, nor even the fact that the Watch design anticipates her interest in a more ‘becoming’ tracker (or to use an old-fashioned but apt phrase, a tracker that ‘becomes her’) that gets her. There is something in the way it takes on some of her burdens of responsibility. It reminds her when she has sat for too long with a gentle, haptic tap on the arm. In the progress towards closure of three coloured rings, a visually economical description of how close, or how far, she is from the day’s targets for responsible, healthy movement is always waiting. More, it keeps her in touch with her other responsibilities: there is a gentle buzz when a meeting is about to start, a ringing vibration when someone is trying to get in touch. This places her geographically distant social relations in a new digital proximity – she can’t miss them. If she was so minded she could even socialise her tracking by using a partner app to post her achievements on social media or even insert herself in live competition with other app users. It is for all these reasons that she has the watch – and the Watch has her.

Devices, devisings and agencings

The case of Apple Watch attachment illustrates how the multiple, bifurcating lines connecting people and their products, products and their people can work. It is no surprise that the metricising qualities of devices like it (trackers, apps, smart phones, tablets etc.) that work by translating huge rafts of human activity into data, has prompted rapidly circulating literatures exploring the political consequences, particularly through the idea of ‘neoliberal’ wellness industries.¹⁰ There is something very compelling in these arguments and in what Bouk (2015) calls the corporate and financial interest in ‘numbering’ our days, but there is also something historically, empirically and sociologically, unsatisfying in what this says about the ‘us’ who are so numbered.

Reaching back to what historians of science and technology had to say about how trust in numbers was accomplished, there is an important emphasis, particularly in Theodore Porter's (1996) account, on the role of rhetoric in establishing the sorts of cultures of objectivity in which quantified measures could thrive. Strategies of quantification, Porter notes, are not merely the tools of politics and public administration, they also 'work in an economy of personal and public knowledge, of trust and suspicion' (1996: 200). The important question is how to think about the ways personal and public knowledge are entangled in these strategies. In many critiques of the neoliberal commandeering of happiness, of wellbeing, of movement, of our very days on earth, by products and practices, of which Apple's Watch is just the tip of a fat iceberg, consumer selves are remarkably compliant, 'buffeted by forces over which they have no influence' (Davies, 2015: xx). There is a stark passivity to this version of the self who is 'done unto'. Personal and public knowledge feed into political and corporate action that moulds consumer identities such that the only available choices are between the hollow differentiations offered in the market. This gives a model of the individual whose fate might be wholly different without the ministrations of neoliberal capitalism. It is a model that also, logically invokes a separation of individual from society, of subject from object, such that the balance and origin of action is with the overweening structures of state and market interests to mould the kind of individuals they need.

It is reasonable enough to read history that way. Still, the empirical histories featured in this collection, question what kind of an entity the individual who so mutely bears social relations is, and about what kind of an organising will is borne by social and political structures. In an early work, Ian Hacking put related questions about how particular sorts of individuals arose in particular sorts of societies in a Foucauldian frame.

I do not believe there is a general story to be told about making up people. Each category has its own history. If we wish to present a partial framework to describe such events, we might think of two vectors. One is the vector of labelling from above, from a community of experts who create a "reality" that some people make their own. Different from this is the vector of the autonomous behaviour of

the person so labelled, which presses from below, creating a reality every expert must face. (Hacking, 1986: 168)

The idea of two interacting vectors, labelling from above and autonomous behaviour from below, that provide the conditions for particular sorts of person to emerge has been used before now to make sense of how consumers behave in retail spaces (Negus and du Gay, 1994). This partial framework offers a useful but not quite sufficient route into thinking about the multiple lines of action that come together in making-up a consumer, a product, a market. It has since been developed much further in literature exploring the role of socio-technical market agencements or devices in distributing action or agency across objects, practices, knowledges and people¹¹. In this mode of analysis there is no hard, fixed separation between human and object, between technology and practice, between personal knowledge and political organisation. Instead, being an individual is accomplished through avidity. This means that it is the struggle to associate, relate, attach to other individuals and other things, that lies beneath all existence. Devices, devisings or ‘agencings’ provide the conceptual tools for thinking about the assemblages through which ways of having, and therefore of being, are figured out.

That this schema can slip into a tautology that has everything in the world participating in making everything in the world the way that it is, has been hazarded before.¹² It is certainly the case that the extended lines of reasoning that are given material form in devices can be difficult for the analyst to know where to cut, to limit.¹³ Where is the end of a device’s sphere of influence, of action, of consequences? Law and Ruppert’s (2013: 229) discussion has devices as ‘more or less patterned teleological arrangements’ with function and purpose – they do things – though not necessarily, or only, the things they are supposed to. In Callon’s terms, devices or ‘socio-technical agencements’ produce or perform their intended consequences in felicitous conditions of ‘fragile and rare’ alignment but ‘the general rule is a misfire’ (2010: 164).¹⁴ This misfiring is what creates the political

issues that surround markets and underpin the long controversies about what sorts of relations, ties or attachments markets should, and should not, get involved with.

The connections between device and consequence cannot be comprehensively described. What escapes tantalises analyses of how market attachment operates. Market devices may have functions and purposes that are designed to arrange market action in particular ways. They may fulfil functions across the long chain of activities that help build market attachment, for instance by incubating technologies, researching target groups, structuring sales pitches, securing early series funding, providing evidence of efficacy, recruiting influential advocates, publicising reviews etc. (c.f. Latour, 1991). Such activities matter and specific devices, from focus groups to ranking algorithms, structure them in ways that can smooth ‘pathways to market’. But devices also act in unaccountable, unfathomable ways. In the old Anglican prayer of confession an earlier sense of the word puts devices and desires together as an intricate collusion in those tricky and deceptive matters of the heart that distract individuals from their proper purposes, into doing *‘those things which we ought not to have done [sic.]’*

This archaic sense has devices working internally, within a person - and also behind her back. This sense of the term is arguably closer to the word ‘agencement’ than contemporary usage, because it carries a sense of machinery, albeit internal machinery, *plus* motivated action. It also implies something about the hard limits to our understanding of how action - whether human, social, natural or scientific - is engineered and the consequences that ensue. Remembering this sense of devices does not mean abandoning careful, technical description of how they work. It does indicate pragmatic moderation, an acknowledgement that social, technical and political knowledge must necessarily be partial and subject to revision. In the context of market attachment this is a programmatic call to empirical description and analyses of the type collected here. Understanding how devices work to attach people to particular products, through processes of listening, co-production and addiction, as Callon explains in closing this collection, is essential to tackling the puzzle of the market. Market encounters are not meetings between agents and goods in waiting, they

are ‘shared but improbable adventures that take place in a multitude of sites and which shape the co-profiling of both goods and agents’ (Callon, this collection, ppp). These adventures have a quality to them that defies full accounting or reckoning. It is for this reason that we refer to ‘the arts’ of market attachment in our title.

Devices and arts

That some market attachments are defiantly, economically irrational, is clearest in cases where the product is categorised as dependency inducing or addictive. In addition to contraband substances, mobile devices, smart watches, activity trackers, screens, games, prescribed opiate painkillers, subprime credit products, alcohol, sugared fizzy drinks and more have been referenced in this category. These are all products that attach people in ways that can lead them to neglect responsibilities, to leave core tasks undone. A common definition used in recovery programs defines addiction as a habit that costs more, for example in damage to health, relationships, productivity, creativity etc., than the money spent on it. Addictions that are structured through the devices of market attachment are arguably on the increase through the consolidated action of big sugar, big technology, big food, big finance, big pharma and big data as well as the more familiar culprit, big tobacco. A case can easily be made that such addictions, in mediating social experience in harmful and destructive ways, have net negative effects on health and wellbeing. The case that these addictions are *devised*, in the contemporary sense of the term, we suggest, is a little harder to make. Natasha Dow Schull’s account (2012; c.f. Poon, 2014) of how gambling addiction is technically, algorithmically designed into contemporary slots machines is powerful but there remains something that artfully resists explanation. This can be roughly summarized by reversing Callon’s question in the Afterword from ‘why do consumers attach themselves more to some goods than others’ to ‘why do *some consumers* attach themselves more to goods than others?’ Addicts have their ‘drugs of choice’, tech users tend to be platform loyal and even cola drinkers resist substituting their favourite brands. The reasons one brand, one product is more ‘becoming’ to one consumer than another lies somewhere between what we call the ‘arts’ and the devices of attachment.

This distinction between the arts and devices of attachment is artificial. If devices also involve the weird workings of machinery, the motives and consequences that escape description, then the term ‘arts’ is superfluous. That it survived the long period it has taken for this collection to come together, indicates that we continued to find something useful, even necessary, in it. There are a number of reasons. The first reflects on the critique that encompassing definitions of devices, those that reach beyond the machine to incorporate dispositions, human beings, action, language etc.¹⁵, risk a tautological collapse. This is Mirowski and Nik-Khah’s (2007) particular point, but the more general argument that those concepts that purport to explain too much end by explaining very little, has also been well rehearsed¹⁶. In using ‘arts’ we section off our interest in those tricky, tenuous, playful and often polarizing elements of attachment that are somewhere in performative utterances like ‘I’ll have it’, ‘I’ll take it!’. A second reason is that these dimensions have had far less attention in science and technology focused market and finance studies in recent years. In this, we acknowledge the justification for Entwistle and Slater’s (2014) complaint that actor-network theory, and by extension its close companion Science and Technology Studies, has had much more to say about economy than it has about ‘culture’. Our response is not a ‘turn back’ – again – to culture¹⁷. It is more an assertion that studying markets socially and technically means attending to *all* their elements, even those that most artfully defy empirical description¹⁸.

This matters because the action of avidity, as it takes place in market framings, relies on both device-like and more artful mechanisms working together. Whether devices are engineered *prima facie* to listen, to co-produce or to addict - as Callon’s helpful programmatic distinction has it - how exactly they succeed – and fail – in making attachments between people and things, is partly mysterious. Arts – aesthetic, pastoral, sentimental, unconscious, playful, dark – are often somewhere in the mix. Such arts, which stretch all the way from commissioning a ‘fine’ artist to work on a campaign, to regulating brand compliance to psychometric consumer profiling, could also be classified as a dimension or sub-function of devices. We have held on to the term anyway because while ‘device’ connotes something that works, that does things, ‘arts’ better signals the uncertainty,

guesswork, sentiment, luck, mystery and failure that is also inherent in attachment. Markets work with avidity, as a general propensity, but deliberately attaching particular things to particular people, and particular people to particular things is, as our contributors in their different ways all show, fraught. The market work of making attachments is constant and relentless partly because detachment is its inevitable other (Callon, Meadel and Rabeharisoa, 2001). To have (something) is also always to have not (something else).

If the work of market attachment often goes unnoticed, it is, paradoxically, the process of detachment that sometimes reveals the strength of the tie. Attempting to change a car, bank, insurance company, credit, or internet service provider, etc. often unmask an array of binding formalities (see Cochoy, this volume). We might consider that each time we buy a product it is possible to enter and leave the relationship as anonymous nobodies, in keeping with the ideal of market transactions. But even where anonymous entry is possible – and in an era of cashless payment, store loyalty cards and online shopping that all demand customer identification anonymous transactions are becoming the exception – on exit we find a ball of ties that we did not suspect and that can be surprisingly difficult to undo. In participating in market transactions we enter a Gordian knot, passing from one node to another. Market attachments are simultaneously the outcome and cause of these transactions

Behind the identification of these attachments lies an entire project, which consists of studying how markets “make”, “unmake”, and thus “remake” society. In the pages that follow some of the varied and unusual types of attachment that arise in the encounters between partners in economic exchange emerge. Markets are extraordinarily rich in issues dear to sociologists. In order to capture these issues, it has been never more urgent to dispose of the idea that the sociological explanation of economy consists of mechanically tracing action in an institutionalised repertoire of more or less immutable entities and prior social properties (such as social class, gender, age, education, income, culture, institutions etc.) that act as independent variables upon the course of economic action. To complete the analysis, and to capture the new forms of market action and the new social, technical

and economic objects that are produced, our contributors study the distribution of action that culminates in exchange closely. This means following how arts and devices work to make, unmake and remake the attachments that comprise the always already social market. It means remembering that people, whether advertising researchers, social media marketers, activists, call centre workers, savers, borrowers, online daters or expert hobbyists, are not the mute bearers of market relations. They are radically complicit. Which is to say that markets are contingent, all the way down, upon the associated action of individuals in attaching, rejecting, complaining, negotiating, reviewing, modifying, hacking, appropriating and refusing market offerings. Recognising this contingency, paradoxically, matters a great deal in regulating what markets should, and should not, have sovereignty over.

The Chapters

Our work to unravel this paradoxical contingency begins with Franck Cochoy's analysis of the pasts and potential futures of the economic sociology of market attachment. As he notes, in its varied accounts of the relationship between societies and markets, sociology has tended to exhibit some confusion about precisely how the two are interrelated. The social, Cochoy argues, should be seen not as a substance that weighs over economic action but as a particular movement of association, the results of which can never be clear from the outset. Associations might produce what will be recognised as societies, they might produce what will be recognised as markets, but they might equally produce forms where the dividing line between society and economy is wholly unclear. This also raises the possibility that markets themselves might be intimately involved in the production of societies. The two conceptual poles of Cochoy's account are 'selection' and 'collection'. The former is the more familiar to students of the economy, encompassing some of the varied ways in which market agents, both individual and organisational, reach out to one another to form novel forms of association. The description of these forms of association matters, with Cochoy assessing the particular potential afforded by the vocabulary of both the "tie" and the "attachment". Mechanisms

of collection meanwhile, have occupied scholars of markets to a far lesser extent. Cochoy points to just some of the highly diverse ways in which markets both depend on and constitute activities and movements of collectivisation. Opening up questions that the following chapters explore further in their own ways, Cochoy highlights the inherent multiplicity of products – that they might better be considered as “bundles” than singular and autonomous. He also exposes the diverse ways in which people coalesce and are coalesced by and around various market processes, ranging from the highly strategic activities of the “engines” of collection, to the opening up of markets to forms of political participation, at a range of scalar registers.

Tomas Ariztia explores the varied uses of Consumer Research (CR) in the making of advertising campaigns. His account reveals the use and value of CR in the practical work of making a useful “truth” about consumers that might help foster attachment. CR, Ariztia shows, is not valued for its ability to mobilize or support “evidence” about consumers but rather for its role in making a stable and specific truth about consumers. Different elements of CR are valued for their role in producing useful, negotiated and specific truths about consumers around which a campaign might be built. This very specific mode of engaging the consumer, Ariztia argues, can be thought of in John Dewey’s terms as an inquiry – a mode of knowledge production that is problem based, rather than based on uncovering an external reference or truth. The consumer ‘truths’ of CR are not stable or external but entirely contingent upon the specific problem or question posited by the campaign design process. This, Ariztia explains is distinct from the role played by CR in other marketing devices, such as product development where CR functions mainly as a test to inform mutual adjustment between goods and consumers. More than a test, CR in advertising is a resource for imagining new (untested) attachments.

Kevin Mellet too focuses on marketing agencies, while at the same time, shifting his analysis to how agencies exploit the potential of online forms of collectivity with particular attention to the role of social media. Mellet’s case concerns a set of agencies that were grappling with what was, at the time of the study, a still new and highly uncertain domain. The challenge for such companies

was how to transform the online social lives of groups of individuals into a source of extractable economic value. These are processes, Mellet shows, that rely on market professionals developing sophisticated understandings of the basis of social action, bringing them at times seemingly quite close to sociologists, in their desire to understand, and ultimately exploit, what might cause and what might shape social action. Attachment in his case is effected through attempts, some inevitably more successful than others, by these experts to harness the potentially powerful forces of contagion, of influence, and of community. How to achieve a “buzz” amongst a particular group about particular product, or how to make a video “go viral” (contagion indeed!) is shown to be an artistic science (a scientific art?). This work is not without its tensions. The very fact that practical work of delivering contagion in markets is often characterised by creating cultural products – a video hoping for virality, for instance – that, to a greater extent than is the case in conventional advertising work, depend for their success, on the unpredictable, on delivering that undefinable something that causes an individual not just to embrace a particular solicitation into their own lives but to share it with others, can push more conservative clients towards more dependable but perhaps less spectacular strategies. This is an important reminder, that market attachment involves processes that operates as much upstream as downstream (e.g. Cochoy 2016a, 2016b), as much towards those that deliver products as towards those that use them, as well as multiple intervening agencies, each with their own goals and types of expertise.

Carolyn Gerlitz’s chapter draws attention to the multiple dimensions of attachment that such digitally aware expert-led activities can engender. Her focus is on the way that brands, in her case Dove and American Apparel, make strategic use of a diversity of actors that already, or could, have degrees of attachment to the brand in question. These attachments are not simply of desire or need, but extend to making use of apparent correspondences between the values exhibited by a particular brand, societal concerns and politically infused projects. A range of actors, from campaigning organisations to the actual and potential end-users of the products the brands are trying to sell, and many of which are operating heavily online, are involved in these attachments. Through the

imbrication of the politically-infused passions of the stakeholders in the very mechanisms that reproduce these brands, it becomes possible to continually reshape the identity, meaning, and indeed ontologies of the brands in question – thus making them ever-more ‘attachable’. What Gerlitz shows is that market attachment is never just attachment in and through markets. Market attachment is a process that works with, indeed thrives off, attachments already operative in a diversity of domains and settings, both informal and institutionalised. To put it in Gerlitz’s terms, attachments are “partible”. That is, they are at once always partial, in that an attachment inevitably attaches to multiple domains, and detachable, with no single domain able to assume that a particular attachment will, in the future, continue to attach the people and things that have been tied to it up until that point.

The resilience and diversity of attachments comes to the fore in Alexandre Mallard’s account in a different way. Mallard uses his expertise on the role of the telephone in market and social life to provocatively re-imagine commercial call centres as ‘cord centres.’ Telephones may have long abandoned their physical cords, but as Mallard reveals, they still play a distinctive role in making cord-like social ties. The telephone cord can *jouer sur la corde sensible*, or touch a soft spot. By enabling us to remotely hold but also hang up the line, telephones frame one of the smoothest and yet most fragile of social interactions. By focusing exchange exclusively on the voice, on the words, on “what matters”, they privilege communication, emotions and meaning. This is especially true in the case of call centres. On the surface, call centres seem more oriented towards instant, anonymous, functional and superficial conversations than towards the development of long term, personal, social and meaningful relationships. But Mallard’s sharp exploration of the technical framing of call centre conversations shows us precisely how these conversations can be managed to build consumer loyalty. The trick is in asymmetry but here of equipment rather than of information. The customer has just her phone and her questions. The call centre professional has her phone too, but she is also equipped with scripts and software that frame the exchange even before it starts. The customer is allocated to a segment in advance then streamed to a particular contact person and treated to a

particular communication strategy. Mallard's account shows how attachments rest on the emerging balance between economic motives, underlying algorithms and market segments, interactional skills and social exchange. Phone equipped commercial conversations, far from adjusting passive prepared questions to correspondingly passive pre-set answers, rely on a continuous and co-productive process of attachment. This requires the adaptability of the talkers but also the flexibility of the full system that works to frame their exchange.

The significance of the broader frame, the system, in which commercial conversation takes place is also prominent in McFall and Deville's chapter. They employ the conceit of markets 'having you' to place questions about the potency and intrusiveness of big digital marketing in an historical frame. Using the example of two companies trading in what have, at different times, been flashpoint industries, industrial assurance and online payday lending, they explore the idea that markets can only exist through 'having' customers who, in turn, must also 'have'. The art of markets, McFall and Deville argue, lies in how this having - of data, relations, associations, ties, 'us' - is practically accomplished. Digitisation generally, and digital marketing in particular, generate critical heat. For Wonga, a payday lender operating exclusively online and claiming a secret algorithmically personalised risk profiling as the basis of their business model, this heat was easily justified and particularly intense. That this heat, when it reached the level of governmental audit, missed its target McFall and Deville, suggest is partly a function of a misunderstanding of the extent and varied history of relationship management strategies in both prime and non-prime financial services industries. The conversation between buyers and sellers is structured historically in a dynamic attempt to devise stable market attachments in spite of the asymmetries of information, technique and equipment between the parties. The variety of these techniques, their histories of success and failure, query some of the stronger epistemological claims made about the commercial uses of big proliferant data.

Ossandón's chapter stays with the low end of financial services and opens with a striking claim: credit cards assemble collectives. In this Ossandón echoes Gerlitz in exposing the diversity,

and unpredictability, of political attachments played out in market settings. The idea of a credit card getting involved in the formation of a collective seems almost counter-intuitive. Credit depends on certainty of a dyadic attachment – between a named creditor and a named borrower or, somewhat less commonly, borrowers. Ossandón shows that, in practice, such dyadic attachments can multiply and become distributed. His focus is on a particular patterns of credit card use in Chile. What he finds in the homes of families living in low-income areas of Santiago are credit cards on the move – both within and between households. Borrowers, he observes, are routinely acting as lenders, both of their own cards and of the access to credit that they afford. The shape of the consumer credit market in such places is thus conditioned by, and at the same time co-produces, collective circuits of social relations. But Ossandón’s story is not just about the domestication of a technology by people as it enters their homes. As he observes, collectivisation in the consumer credit market, in Chile as much as pretty much anywhere else, profits from the data-driven assembly of populations, via the risk-driven management of current and future borrowers. The fact that only the lender can see and draw relations between the individuals brought together in their databases and modelled predictions creates the illusion that what is being produced by the database is somehow separate from the conduct and constitution of social life. As Ossandón notes, credit card sharing practices are equally invisible – not to their practitioners or curious ethnographers – but to the credit issuers dependent on assembling data traces. Like many of the contributions collected here, Ossandón’s case lays bare not only the strangeness of what, for some, is a familiar, everyday practice but also how markets have, inevitably, to be made through social practices.

Emmanuel Kessous takes this point further still in examining the market for love and intimacy that operates on dating websites. Kessous’s discussion enters two major debates in economic sociology. The first debate concerns how markets are best defined: as “platforms” meant to bridge the two blocks of supply and demand or as involving the production of bilateral transactions aimed at attaching particular goods to particular agents (Callon, 2015). The second debate is about the “contested” character of markets and the moral concerns that are provoked when market-like

solutions are applied to certain ‘goods’. ‘Goods’ here are not necessarily tangible products but may be any of a range of societally and individually significant functions for example surrogacy, organs, biotechnical services, or in this case love (Steiner and Trespeusch, 2016). Kessous’ study contributes to both debates. First, by unveiling the inner working of dating websites Kessous shows, that in some configurations at least, market as platforms and markets as matching devices go hand in hand. The dating site is clearly designed as a market platform focused on pairing supply and demand for love (even if both sides are fully interchangeable), but it is also conceived as a manufacturer of love. Production and exchange are fully intertwined: the candidates for love are not preset products with given characteristics offered on a market, but full human actors who continuously and interactively adjust their properties in order to reach (hopefully) a successful encounter... or transaction. This latter hesitation brings us to the second debate and contribution. Kessous’s case directly exposes the ambivalent meaning of “attachments” as bonds that share the sacred value of human relationships and the technical dimension of material ties. Online dating, by favouring reflexive and strategic-like behaviours, also, simultaneously, favours a kind of exchange that misses its goal of real love-like “attachments”. Almost as if the market for love was both fulfilling and contesting itself.

In the penultimate chapter Hans Kjellberg confronts the art of market attachment at its core by exploring the purest, most fascinating case: the hybrid bond that exists between a consumer and a product. Kjellberg’s contribution is methodological, empirical, and conceptual. It is methodological, in the way that auto-ethnography is used to generate a more illuminating close-up of this bond than may be possible through classic sociological inquiry. Instead of a well-chosen, representative sample or population, Kjellberg focuses on a pure idiosyncratic case, the purchase of a vintage Ford Thunderbird. He pushes the idiosyncrasy further by showing that the significance of this particular case can best be revealed through the particular experience of the researcher himself. This methodology gives Kjellberg’s empirical contribution its force. His account shows that focusing on one single link — the relationship between the researcher and his car — unveils many, many others. Contrary to what economists and sociologists often think, the relationship between consumer and

good is not an isolated dyad. It is just a first node leading to a huge network of unexpected encounters and sociotechnical attachments. Just like Alice's talking rabbit, Hans' roaring car drives us into a wonderland. Following the car unveils an incredibly rich world, made of goods, contracts, pieces but also interactions, friendship and love. At last, we discover that the economic attachment with a single good may end up reshaping a full society. The contribution is thus conceptual, since it shows that economic attachments, far from restricting people to a one-dimensional and predictable sphere of materialism and economic subordination rather associate and recombine technical and human dimensions to produce novel and often unexpected "agencements", in the proper Callonian sense indicating bundles of technical and human agencies (Callon, 2015).

The collection concludes with a commentary by Michel Callon that underlines the real necessity of considering the series of trials that result in market attachment. Understanding the puzzle of the market, he explains, means investigating the mixture of fragile and resilient attachments that underpin the success and failure of commercial transactions. This means giving up finally on the idea that producers and consumers, buyers and sellers just wait in their separate domains for a suitable place, an agora, they can go to. Instead markets happen in a wonderland, or a territory on which conscionable, and unconscionable, maps work together, not often in harmony, to transform or more accurately 'co-profile' goods and agents. The arts and devices we describe act as maps to market territory. As in Luis Borges' (1946) well used story, where the obsession with final exactitude in the scientific study of markets or society leaves only a mess of 'tattered remains', a useful and limited map makes for a navigable territory. Callon's taxonomy of three market devices focused primarily on listening, co-production and addiction works as a useful map to some of the predominant activity ongoing in the territory of contemporary market attachment. That these devices are artful in their inexactitudes, secrets and failures goes with the territory of attachment that Callon so precisely captures:

the process of attachment is equally a process of expression, in which they learn what they are and what they are becoming, and whereby, symmetrically, things and goods express what they are or what they can do and “make do”.

¹ In this regard the work by Hennion (2004); Hennion (2010), Hennion, Méadel and Bowker (1989); Latour (1991); Cochoy (1998; 2005; 2008) Callon, Méadel and Rabeharisoa (2001); Callon (2005); Musselin and Paradeise (2005) has been especially important and influential. Much of this is reprised in Callon *et al.* (2013) and see also McFall (2014) and the contributions to Cochoy, Trompette & Araujo (2015)

² Building on earlier collaborative work, notably with Emilie Gomart, Geoffrey Bowker and Cécile Méadel (Gomart and Hennion, 1999; Hennion, A., Méadel, C. & Bowker, G. (1989)) Hennion’s understanding of attachment marks a break with the extensive and, in Anglophone social science, more widely known discussion of attachment associated with psychologist John Bowlby’s research on the bonds between parents and children and their effects (See Redman, 2008). It is also largely distinct from the body of work within feminist theory concerned with questions of painful/problematic psychic and bodily attachment. A discussion of the points of correspondence between these different strands of work is beyond our scope here but see Deville (2015).

³ See Caliskan and Callon (2009; 2010); Callon (2005a; 2005b), Miller (2002; 2005), Mirowski and Nik-Khah (2007); Musselin and Paradeise (2005)

⁴ In 2016 Google’s parent company Alphabet passed Apple as the world’s most valuable company <http://www.bloomberg.com/news/articles/2016-02-02/google-parent-to-overtake-apple-as-world-s-most-valuable-company> but Forbes was still ranking it as the most valuable brand <http://www.forbes.com/powerful-brands/list/>

⁵ See Montgomerie and Roscoe (2013); Lazonick, Mazzucato, & Tulum (2013)

⁶ As an aside ‘intu’ was the brand chosen in 2013 by Capital Shopping Centres, one of the UK’s largest centre management companies, as a way of signalling their ‘new nationwide consumer-facing shopping centre brand and the transformation of its digital proposition’. <https://www.intugroup.co.uk/investors/shareholders-bondholders/transaction-archive/operational-initiatives-and-change-of-name/> <http://uk.reuters.com/article/uk-csc-intu-idUKBRE90E00720130115>

⁷ There is even a high profile campaign to rehome unused trackers run by Tufts professor Lisa Gualtieri <https://www.facebook.com/recyclehealth/> .

⁸ ‘Stickiness’ is used in the tech industry to refer to qualities, particularly in websites but also of devices like wearables, that encourage people to stay with, or attached to, the product for longer. <http://www.wsj.com/articles/apple-watch-with-sizable-sales-cant-shake-its-critics-1461524901> ; <http://bigstory.ap.org/article/2700956044de4517a471a47c3243078b/strong-sales-high-abandonment-fitness-trackers> <https://rockhealth.com/reports/digital-health-consumer-adoption-2015/>

⁹ The iTunes ecosystem is a walled garden, where on the one hand, Apple has full control over what’s accepted, while on the other, the iTunes chart algorithm decides which apps gain visibility. These charts continuously publish and update a list of “top” applications split by categories. The higher an app is ranked in the charts, the more users see and download it. We don’t know exactly how the ranking algorithm works, but the general consensus is that both recent downloads and app usage affect it. <https://medium.com/i-data/apple-s-app-charts-2015-data-and-trends-abb95300df57#.d7k9tlv5q>

¹⁰ Beer, D. (2015); Cederstrom & Spicer (2015); Davies, W. (2015); Lupton, D. (2014) Schüll, N. D. (2016)

¹¹ Cochoy, F., Trompette, P., & Araujo, L. (2016); McFall (2014); Caliskan and Callon (2009; 2010); Callon, Muniesa and Millo (2007); Callon, Meadel and Rabeharisoa (2001); Callon [ed.] (1998); Cochoy (1998; 2005; 2008);

¹² Mirowski and Nik-Khah (2007); Law and Ruppert (2013)

¹³ See also Deleuze (1991) on reason and dispositif

¹⁴ This misfiring is what creates issues and matters of concern ‘in the form of controversies over the nature of relations between that which is delegated to the economy and that which remains outside of it. Saying and doing the economy because all economies are said and done (Caliskan & Callon 2009) means entering into the agonistic field where the delimitation-bifurcation between the economy and politics is constantly being debated and played out’ Callon, (2010: 165).

¹⁵ See especially Callon (2007, 2010) and the introduction to Callon, Muniesa and Millo (2007) for more on this.

¹⁶ See McFall (2014b) for a longer discussion of this critique

¹⁷ Aside from adding to the dizzying succession of cultural, material, post-material turns we are hesitant about reinforcing a strong boundary between economies and cultures that in practice are constituent, contingent parts of each other until disentangled by their analysts. See also <http://www.charisma-network.net/> and McFall (2015) for an overview of how the Journal of Cultural Economy and its contributors have tackled these questions.

¹⁸ This includes our own dispositional tendencies: the management of curiosity, for instance, has been described as the very ‘art’ of market seduction (Cochoy 2016b).

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