Diogenes 217: 68–83 ISSN 0392-1921

Social Influence by Artefacts

Martin W. Bauer

Fait accompli: an action which is completed (and irreversible) before affected parties hear of it having been undertaken; a fait accompli can wait for an official raison d'être (Oxford English Dictionary, 1989)

Social psychology has traditionally dealt with social influence in relation to intersubjective norms, our mutual expectations regarding belief, opinion and attitude towards the world and people; it deals with how we think and act, and how we ought not to. My motivation to explore artefacts as types of social influence stems from years of research and teaching on controversies related to nuclear power, information technology and genetic engineering. In this context it appears that social psychology, because it has little to say about 'objectification', is relegated to the role of 'acceptance provider' for the 'fait accompli'. Psychology is called on to provide a 'box of tricks' to persuade and to influence a sometimes reluctant public to adopt new products, and to forestall and counteract 'ill-informed' resistance to technological projects. This might be satisfactory for creating opportunities for consultants and cohorts of university students, but it does not satisfy theoretical aspirations. In this paper I explore avenues to render social psychology theoretically relevant for more than just hitching a ride on the back of technocratic dreams.

Sunnyville: a story of somewhere

Let us start with the story of a small town called 'Sunnyville'. Mr and Mrs Wall and their three children live in a comfortable house. Their extended front garden is open to the street, where people come and go in pursuit of their daily routine. The town's children play in the street, and occasionally they extend their playground onto the Walls's immaculately kept lawn. From time to time cars appear on the lawn, in particular when a concert in the nearby park creates a shortage of parking spaces. Drunkards and hooligans too leave litter and sprawl on the lawn during their

> Copyright © UNESCO 2008 SAGE: Los Angeles, London, New Delhi and Singapore, http://dio.sagepub.com DOI: 10.1177/0392192107087918

night-time binges. Mr Wall and his family feel that their garden should be a no-go area and that everyone should respect the boundary between public street and private garden. How might they achieve this?

Mr Wall is a respected community leader and has acted for years as the mayor of Sunnyville. One day he calls a community meeting to discuss the unclear boundary of his garden and the attitudes and actions of passers-by. He hopes to define, once and for all, what is street and what is lawn, and how to set some rules of behaviour. After hearing and discussing a range of views, a new communal norm is agreed: the street/lawn boundary will be marked by setting a line of stones into the lawn. Everybody seems happy, and normal life resumes in Sunnyville.

Then newcomers arrive in town. They have little knowledge of the community, and 'misuse' the Wall family's lawn. Wall takes advice from a local 'wise man' who suggests that newcomers may be too busy or cognitively challenged to take notice of local habits. They have no time or are unable to consider an issue in depth, they will need some 'hints' to bring them into line. Mr Wall devises a leaflet that says 'Do Not Trespass!'. He describes a beautiful, peaceful Sunnyville and sets out an account that explains why the boundary between lawn and street exists. He stresses his status as town mayor, and calls on everyone to abide by the convention or risk naming and shaming, or even exclusion from the community. This leaflet is widely distributed and handed to every newcomer upon arrival. It works; the newcomers respect the rules. However, rumours reach Mr Wall that not all members of the community are in agreement. Some disagree with him in private, while in public they continue to abide by the rule and do not speak out against it. Mr Wall steps up his leaflet campaign, revising it to stress how beautiful and peaceful this town is and deserves to continue to be.

Soon, some ignominious few – and it turns out they are the people behind the town's rock concerts – start to voice dissent and to challenge the demarcation between lawn and street. Wall is worried that this challenge might be 'contagious', in particular that local youths might be prone to imitate their admired 'musical heroes'. He is particularly apprehensive about large public gatherings. He has recently read a book by an author called LeBon. Apparently, people in groups are not in their normal state of mind, and are likely to be swayed by the rhetoric of agitators.

Indeed, the small group of music fans grows in influence, propounding 'drivel and abuse' (according to Wall's friends) in the local pubs and picketing the Town Hall. Gossip alerts Wall to the idea that many townsmen are beginning to waver in their support for the status quo. He calls a council meeting to air the arguments. After much to and fro, new boundaries and rules are established: cars are now allowed to park on the lawn on concert days, and children may play there on Wednesdays after school and on public holidays. The community norm has shifted. Mr Wall, his family and friends give way, having been persuaded not only that the previous boundary was wrong, but also that the new agreement will keep the peace.

The classical psychology of social influence

What is the point of this slightly unrealistic story? It will serve to illustrate how social psychology conceives social influence (see the fine overview by Paicheler, 1988) and its limits.

Social psychology studies the establishment of norms within the paradigm of normalization: a group is constituted by the establishment of an aggregate compromise of how to see and relate to things. This compromise establishes a frame of reference to which participants are committed (Sherif, 1936). The modalities of how to sustain an established norm and attitude in the face of challenge is the focus of experiments on majority influence (Asch, 1952). It is demonstrated that peer pressure enforces conformity with rules by capitalizing on the human need for affiliations: the individual avoids social exclusion (in relation to others), but also tries to reduce uncertainty (in relation to the world of objects) by listening to others, and to maintain a positive self-evaluation (in relation to the self). The obedience and compliance paradigm (Milgram, 1974) dramatically demonstrates the power of authority. A 'man in a white coat' is able to neutralize moral inhibitions and make 'everyman' inflict harm on others in the name of science or some other respected cause. By complying with moral and scientific authority, which we invest with reasonable trust, we abdicate control, enter an 'agent state', and potentially behave abhorrently. Many studies explore how obedience and compliance are contingent and therefore expressive of culture (Blass, 2000). The paradigm of minority influence (Moscovici, 1976; Maass and Clark, 1984; Mugny and Perez, 1991) demonstrates how established norms change under dissent and introduces the distinction between active and passive deviance. Consistent active minorities inform the majority and lead them to reconsider their take on the world. Organized minorities influence by inducing a latent conversion among the majority but miss out on the credit for achieving this: the 'sleeper effect' ensures that we remember the message but not its source. This all suggests two different processes of social influence: majorities achieve conformity in public, while dissent might continue in private; minorities make us rethink privately, while we still conform publicly, but maybe only for a while. Minorities induce a rethink about the world (informational processes), while majorities make us consider others (normative processes). In inter-group action these processes are nested: an active minority needs conformity among its members to assure that it can act and is perceived as consistent, which is the key to its potential success among the majority (see Cranach, 1996).

These paradigms have a rational core – people yield to influence by assessing claims to be morally right, true and authentic – which contrasts with older theories that stress the irrationality of social influence. LeBon's *Crowd Psychology* (1895) and Tarde's *Laws of Imitation* (Tarde, 1990, originally published 1890) modelled unconscious human suggestibility. Human association in public spaces, according to LeBon, changes rationally minded individuals into shadows of themselves, reduces them to 'passive masses' waiting to be manipulated by a determined *leadership*. Irrespective of whether this theory ever was a valid analysis of collective behaviour or more a fin-de-siècle expression of moral panic, it received its widest reception amongst societal elites well into the 20th century (van Ginneken, 1992). Tarde (1890)

elaborated the theme of social contagion. Similarities in mores and behaviours arise from genetic inheritance or social imitation. What common ancestry cannot explain, the laws of imitation must do: for example, imitation follows the social hierarchy top-down (but consider today's haute couture, it seems to work bottom-up as punk elements enter the mainstream); or inward change anticipates outward change, thus the imitation of thinking and feeling precedes the copying of behaviour (this idea lives on in minority influence and conversion). The ad hoc nature of these regularities is demonstrated by 'thirst is stronger than hunger', which apparently explained the prevalence of alcoholism over obesity in the late 19th century. The recent revival in theories of contagion focuses on 'memes' in analogy to genes (e.g. Lynch, 1996). Contagion and suggestibility is not a rational process, but subliminal and atavistic. Apparently, certain 'content features' make some beliefs stick and others not, and universally so. The revival of the 'doctrine of suggestion' often merges with the polemical tradition of 'debunking': the sport of denouncing as 'mumbo-jumbo' the 'false beliefs' that carry the popular imagination (Mackey, 1841; Wheen, 2004).

Post-Second World War paradigms of social influence research show that 'suggestibility' has a rational core, preserving a relationship of trust within a community. The total suspension of reason is at most a special case (Asch, 1952; Moscovici, 1985). Being influenced allows for rational considerations of the state of the world and the effectiveness of action, the handling of social relationships and the maintenance of a positive self-concept. However, the moral problem remains, whether seeking influence is a strategic action with the purpose of seeking unilateral success or whether it is part of communicative action to reach a common understanding (Habermas, 1981).

Reconsidering the psychology of social influence

The story back in Sunnyville, meanwhile, is some way from any similar situation that might occur in real life. Let us explore some of the real life issues.

First, it appears that underpinning the story of Mr Wall is the existence of a community of people with 'civic commitment', who will follow calls for meetings to discuss and agree an amicable compromise, enforce these by naming and shaming contravening persons, and shift their opinions in the light of strong arguments. It is assumed that the 'guns are silent' and neither violence nor authority plays a part. The story as well as the experiments of social psychology, which stage social influences for the purposes of research, assume such a context as a condition sine qua non. However, this moral community might be an 'ethnocentric' desirable, historically situated, rather than a universal fact.

Second, the attempts of the Walls to protect their garden from undue trespass will be, at least in the context of modern societies, within the statutory law, formally written and enforced by the courts and a state monopoly. This should guarantee the Walls their property and testify to the boundaries of their estate. However, formal law requires a general attitude of respect towards the law, a factor that binds the community to a context wider than itself. If property is trespassed, it becomes a matter for the police to enforce the law under threat of punishment through fines or imprisonment. In real life, the Walls might call the police rather than a community meeting. Furthermore, property law and the highway code are part of the constitution of the land. Sunnyville is not a world isolated unto itself, but linked to other entities through the legal constitution.

Third, in real life Mr Wall is likely to build a fence or a solid wall to prevent trespass. Rather than relying on a toothless sign 'Do Not Trespass!', or on the occasional police patrol, simple brickwork will do the job most effectively. This technical solution, an artefact, will demarcate, solidify and objectify the boundary. It will lead those unfamiliar and even those who might dissent to behave properly on that patch of land. This wall will do many things, and it is important to know how it came about. Several scenarios are imaginable.

Mr Wall might have called a town meeting, argued his case, listened to others, and obtained consent to build the wall between his garden and the street. The wall will become a feature of the community. Thus the wall will have been built in a civic spirit where common understanding prevails over the instrumental attitude of particular interests: a solution that works, that is morally right and which, with the promised mural paintings, might also be aesthetically pleasing. Much of this scenario describes the kind of public deliberation that is modelled on assemblies in 18th-century New England religious communities or London coffee-houses (Habermas, 1962).

In a different scenario, Mr Wall has put up the wall as a 'fait accompli', almost overnight, and counts on the normative power of facts: what is, ought to be. Artefacts are strong enforcers in and of themselves. A wall functions as a physical 'lock-out', keeping people out or deterring certain actions: only the most determined and able bodied will make the effort to climb, risking injury or ruining their clothes. For example, Long Island bridges, which were built too low for public transport, thereby kept out, at the time of construction, those poorer people who depended on public transport; or gadgets, made so that you cannot open and repair them, force you to buy new ones. A wall might also be a 'lock-in', preventing people from leaving a space. Another type of lock-in could be the skills and habits erected around a certain word-processing programme: to shift to another one is too complicated, so you remain loyal to a product you learned to handle many years ago, and you dutifully update the software on a regular cycle, whatever the cost. The Sunnyville wall also 'interlocks': to reach the park behind the Walls's house, people have to go around the house rather than through the garden. With interlocks, designers ensure that one action is the necessary antecedent of another. So, you might be required to fasten a seatbelt before the car engine will start, or, at an ATM machine, take your card out before the money is dispensed. Hotel keys are too big to carry so you leave them at the hotel reception before you leave for the day (see, for a general discussion, Brey, 2005). Designers talk of 'captology', persuasive design (Fogg, 1998) and 'emotional design' (Norman, 2004) to highlight their power to mould the attitudes and behaviours of users. Objects are inscripted with actions, and 'feel good' things are desirable and work better. Artefacts influence people directly and subconsciously. A wall offers affordances (Gibson, 1977), i.e. perceptual characteristics linked to certain actions: most people will see the wall as something 'to be respected', 'not to be climbed' and 'to walk along', and that in relation to a whole range of motives. Only a well-trained climber intending to trespass might see a 'surface to climb', where most others would see 'a barrier'; but there might be an electrified wall-top to further dissuade the former. The wall frames the life of passers-by in Sunnyville. Parking and sunbathing on the lawn are now impossible, and these very intentions will fade from the spectrum of local leisure activities. The imperative of a moral appeal or a police patrol is delegated to brickwork (Latour, 1994). Functionally equivalent for achieving the desired outcome, it might even be cheaper and more effective. The wall enforces itself: through the direct pain of collision or through the anticipated pain of electrocution (in cases of electrified tops).

The Sunnyville wall has now been embellished with murals by a famous artist and has become a local venue, a symbol of local identity, attracting sightseers to a piece of renowned artistic expression. Erecting a wall to manage community relations is just one of many 'social constructions'; it is a technical solution to a problem in community life. What is less clear for walls is more in evidence with other artefacts: tools require the physiological and psychological adjustment of the user. Boesch (1997) shows how a violin player, in her struggles with the recalcitrant instrument, develops a certain posture and sensori-motor agility of fingers, arms and shoulders, and buys into a culture and a utopian project: the 'Apollonian' ideal of producing 'the pure sound without noise'. This aesthetic quest for the purity of the 'sound object' more than any other potential outcome sustains the painful efforts of practising. More generally, the presence of artefacts represents how a community wants to live; an object is a project for a subject (Bauer and Gaskell, 1999).

The brick wall brings peace and quiet, but it also 'makes dependent'. Somebody supplies the bricks and bricklaying. With the years the wall will decay, and repairs will be needed. This not only ties the Wall family to the building trade, but the building trade itself is variously locked into skills, standards and machinery beyond rational control (David, 1985). Artefacts are places where the present meets the past, so that whoever engages the wall engages with an entire chain of people who contributed in some past era: brick makers, bricklayers, engineers and their frameworks of rationality that include utopian visions of a better world. Thus past actions frame present and future behaviour. The wall tells us what not to do, here and now, and thus takes us into its reasons past. The wall adds to an infrastructure of cars, streets, houses, energy supply, computers and everyday gadgetry. It adds to the societal constitution of artefacts and their afforded routines, the inter-objectivity (Latour, 1996). It is therefore not surprising that many people sense that such powerful artefacts should require public consent. Artefacts like social norms require legitimacy; their sheer facility alone is not sufficient. They require reasoned consistency with values and ambitions. However, we face a traditional asymmetry: that new norms need legitimacy is the very business of politics; that new artefacts need legitimacy seems not be taken for granted. First, we need to recognize that artefacts are the continuation of politics by other means, thus artefacts are political too (Winner, 1985).

In my story of Sunnyville the mural solution is a metonymy for technological solutions in general. One of the key issues for Mr Wall is to ensure that his brickwork is legal and is seen to be legitimate. Therefore the question of due process arises: how has the wall come about, was consent given, or how can consent be achieved after the fact? Is this consent binding for newcomers?

Diogenes 217

If Wall had constructed his wall as a fait accompli, he would have hoped that people would find good reasons to accept the wall. A fait accompli apparently can wait for its raison d'être. The inter-subjectivity of norms, the problem of establishment, enforcement and redesign in the face of dissent, is relatively well understood, as I showed above. By contrast, the inter-objectivity of artefacts is largely seen as a matter of 'conformity' and 'compliance' which have been put in place by the authority of experts. Technical artefacts are the remit of scientists and engineers, and the role of social psychology is to offer a box of tricks to secure public acceptance in the marketplace and in the arena of politics. Technocrats see in uninformed political interference – and the public is assumed to be uninformed – a recipe for disaster; they fear a 'cow designed by a committee'.

In modern societies the process of establishing, enforcing and changing norms happens within a public sphere buttressed by freedom of speech and mass communication (which is my fourth point of unreality in Sunnyville). Issues are aired, circulated and brought to attention in public forums mediated by professionals according to operating rules, with newsprint, radio, television or the internet generating genres of communication. The making and breaking of norms takes place in this formal context, and no longer exclusively in face-to-face interaction. We must ask: how do the public sphere and face-to-face interaction, as modelled by social psychological experiments, go together?

Back in Sunnyville once again Mr Wall, faced with the need to defend his wall, considers using the mass media for legitimizing his mural fait accompli. His previous use of leafleting was already a rudimentary form of mass communication. But now bigger guns have been mobilized. He and 'friends in high places' have the initial advantage, but their storyline is not guaranteed. Mass media are part of an information market, more or less free, that balances news with the tastes and interests of large audiences. Here the voices of dissent might have an opening. The initially small group of dissenters is an 'active minority', who by consistent and persistent agitation draw attention to their cause: the wall is not an acceptable solution. They might organize a press officer, with friends in the media, who feeds the mass media with stories on the 'Scandal of Sunnyville'. Resistance might take the form of nightly sabotage to the wall; or, more symbolically, 'guerrilla marketing' (Amann, 2005) is staged in front of TV cameras that make the national news. The wall issue might become a main news item. This is how the issue is reframed for the wider public: the 'Peace and Comfort of Beautiful Sunnyville' (sponsored by Wall and his friends) becomes the 'The Ugly Abuse of Power in Sunnyville' (sponsored by the active dissenters). Faced with a barrage of media coverage, Mr Wall and his friends can no longer ignore the local resistance. As if reacting to physical pain, they reluctantly recognize that 'something is wrong', they re-examine the issue and warm to a change of mind and project (Bauer, 1995). With the help of more 'wise-man' advice, Mr Wall reconsiders the situation. He begins to see the wall in the light of the 'lockout' it creates; his relationship to the community changes from a paternalistic attitude to one of 'enlightened citizenship'; and he consider a redesign of the wall or even its dismantling. Ironically, the latter might not be necessary because, as local resistance succeeds, the mural artefact becomes a symbol of 'evil overcome'. Thus a part of the wall will be preserved as 'local heritage' (Breeze, 2000). Resistance fosters social identities and reassures existentially: '*Je* me revolte, donc *nous* sommes [*I* dissent, therefore *we* are]' (Camus, 1965, 432).

Development of technological projects is tied, on a much larger scale than the Sunnyville wall, to how the association of people and things develops a common purpose. This suggests that technology is a quasi-social movement that mobilizes resources and anticipates, confronts, assimilates and accommodates resistances, and navigates the future like an expedition into unknown territories driven forward by the quest for El Dorado (Bauer, 2002; Sloterdijk, 2005). To study the contributions of resistance to technological projects is therefore a necessary complement to the bias towards innovation in technology management, and forms part of a research programme on the development of genetic engineering in the late 20th century (Bauer, 1995, 2005; Bauer and Gaskell, 2002).

Excursion: recovering the fait accompli in the making

Models of influence focus on the 'soft side', the intangible inter-subjectivity of mutual expectations (norms) and shared judgements (attitudes) that constitute social groups and inter-group behaviour. However, Asch (1952: 178) noted that social interaction has a twofold outcome of relative permanence: social norms and technical artefacts. But henceforth social psychology specialized in the making and breaking of inter-subjective norms, while 'objectivity' became a principle of methodology rather than a phenomenon in its own right. The focus of social influence research is on 'soft' inter-subjectivity, face-to-face communication, while the 'hard' inter-objectivity of affordances and 'persuasive designs' does not enter the frame.

It is not entirely a novel concern to include artefacts in the remit of social psychology. Already, Wundt's 'Völkerpsychologie' had such ambitions in the late 19th century (see Farr, 1983). Equally, Mueller-Freienfels, a psychologist of the inter-war years, urged in his 'Psychology of Science' (1936) and in his 'Social and Cultural Psychology' (1930) that we needed to consider objectification (externalization) and subjectification (internalization), the two processes of achieving world and social adequacy in human activities. In the 1920s, applied psychology distinguished 'Objekt-Psychotechnik' – the design of objects to fit human anatomy, physiology and psychology (later to become Ergonomics) – from 'Subject-Psychotechnik' – the adaptation of people to tools and machines through training in motivation and skills and selection by traits. The latter came to prevail in applied psychology; although late 20th-century work psychology, based on activity theory, has a more balanced record (see Frese and Zapf, 1994).

Anders (1980/2002), musicologist and psychologist, called for a 'thing-psychology' in the 1950s to break the mental stupor that modern civilization apparently suffered in the face of technology. We seem awe-struck as if technology were sacred, terrifying and fascinating ('Der heilige Sachzwang' according to Heinrich Böll). Anders saw human relations as dominated by object-relations, even if this fact was taboo and not perceptible. Social psychology's bias towards inter-subjectivity is an ideological frame of mind clouded by the logic of powerful machinery. It was the technocratic outlook that was shared across the ideological divides of the Iron Curtain; Anders was thinking in the context of the atomic bombs of Hiroshima and Nagasaki.

More recently Joerges (1988) reminded psychologists of the dominant ex-postfacto concept of artefacts: First, diffusion researchers profile psychological types by their timing of acceptance, e.g. early adopters, late adopters and laggards, and attempt to change their attitudes by designing 'sticky messages' for formal and informal communication (Valente and Rogers, 1995). Second, attitude researchers consider artefacts only ex-post-facto for the making or breaking of subjectivity. Attitudes to not-(yet)-existing facts are treated as a measurement problem: people will express opinions on anything if asked, and these are often 'non-attitudes'. Attitude research says nothing on how objects come about, and the role played in that by attitudes. Third, people cope symbolically with novel artefacts and their associated dangers (e.g. Wagner et al., 2002; Joffe, 2003). The stress metaphor 'coping' again suggests reactivity ex-post-factum. Similarly, cognitive dissonance has modelled how people adjust their mentality to a fait accompli. People balance any conflicts among afterthoughts by foregrounding the positive outcomes and ignoring the negative ones, so that the act appears reasonable in hindsight. It does not matter how the act came about, by impulse or by affordance of a fait accompli. And surprisingly, the lesser the reward, the more we find good reasons in the act itself (for a review see Eagly and Chaiken, 1993: 505ff). Fourth, artefacts have symbolic value. Possessions confer identity by marking social status and individual self-expression in public and private spaces (Habermas, 1999). The meaning of artefacts goes beyond use-value, but again they exist a priori. And finally, in the ontogenetic perspective, 'thing constancy' signals the demise of infantile egocentrism, as the child enters the given world. The self-other differentiation, role-playing and the acquisition of symbolic language expose the child to the higher cognitive functions needed for tool-making and other achievements of human life. But again the child seems to arrive in a pre-existing world - albeit this remains a contested issue for educationalists.

The assumption of objects ex-post-facto buttresses the traditional focus on intersubjectivity. Social psychology has little to say about objectification, the making and breaking of artefacts as social influence. Why this blind spot? Social psychology is not isolated here, but shares with other social sciences a heritage of shying away from giving 'hard' facts their due. The term 'inter-objectivity' has recently been introduced by Latour (1996) to mark this malaise of sociological thinking. An anxiety prevails about attributing influence to objects which is traceable to Biblical or equivocal iconoclasm and polemics against fetishism. A 'fetish' is a thing with agency. The separation of a realm of causality (nature) and a realm of agency (society), and the cleansing of nature from agencies is the culmination of a long process of disenchanting and rationalizing the world, however incomplete (Boehme, 2006; Festinger, 1983; Keane, 2003). The dualistic fallacy – nature there, society here – buttresses the view that artefacts *are either* inevitable progress *or* fetish-type reification that are to be smashed because they alienate us from our real concerns. It is important to see that they are neither, but are part of a changing societal constitution that requires legitimacy.

Bauer: Social influence by Artefacts

Excursion: face-to-face or mass communication

Social psychological experiments, like those on majority and minority influence, gave generations of college students, obliged to participate in these exercises, their degrees (Sears, 1986), and social psychology its 'scientific credentials'. The laboratory stages ad hoc group meetings and, recently, computer-mediated interaction too. Generalizing on the basis of the results from these paradigms must be limited to these types of situations. This is not a problem when the contingencies of the laboratory are clearly defined (Farr, 1984; Hoyland, 1959). Many of these experiments gain renewed relevance in deliberative policy-making when it involves faceto-face focus groups, public forums and consensus conferences for controversial areas of policy-making. However, the power of these paradigms is limited in modern mass media systems. Modern social life is a mixture of informal and formal communication. Social influence is underspecified when we consider these parallel modes of communication. Formalized communication provides an environment for face-to-face interactions and vice versa. How do we conceptualize compromise, conformity, compliance and conversion when communication is excessive and has been professionalized into genres of print mass media, radio, television and internet?

Let us go back to Sunnyville one more time, to find that some 'ignominious few' have raised doubts over the mural solution. Now Mr Wall could attempt, with the help of the 'wise men' that know about these things, to control the mass media: he therefore decides to put dissent into disrepute, presents the mural solution as legitimate, praises his wall as a 'revolutionary design using hi-tech materials', and deplores the divisions within the community when unity is required in an ongoing dispute with central powers; he might even try to force the hand of the newspaper editor by threatening to withdraw from a town advertising contract. For his and the interests of the community are the same. To the casual reader of the Sunnyville *Tribune* it will appear that majority opinion supports the wall. A straw poll taken by the newspaper puts the figures at 63% in favour, 18% against, 19% undecided (n = 117). The headline reads 'Majority Supports Wall'. Dithering citizens of Sunnyville will take this as a cue to support the majority opinion and a reason to conform: few like to be branded a 'dissident'. Noelle-Neumann (1990) called this dynamic a 'spiral of silence': dominant press coverage is experienced as peer pressure; dissenters increasingly shut up and withdraw into private exile. This spiral, difficult to demonstrate experimentally, works reliably in circumstances where a real community feels 'under siege' from threatening adversaries.

A different scenario involves the mobilization of expert opinion in the mass media. In this instance Mr Wall finds a famous Professor of Law and an equally highprofile Historian of Architecture to testify that the wall solution is consistent with the law of the land and a 'vanguard' contribution to local landscape and architectural history by its fusion of technical and aesthetic concerns. Rothman (1990) argued that 'consensual expert opinion', in the context of techno-scientific controversies, carries the opinions of a dispersed public audience. What in Milgram's experiments was the 'white coat' of the experimenter and his appeal to the 'scientific purpose of a learning experiment' is, in the context of Storyville, the consensual expert opinion on the mural solution: an ethos driver of public opinion.

Diogenes 217

Finally, I reconsider the dissidence scenario of Sunnyville. The 'ignominious few' managed to reopen the debate about the wall as a public issue after it had appeared to be closed, and to put it back on the town agenda. Finally, in this scenario, the wall is rerouted and partially dismantled. How did sworn dissenters succeed? Not only did they organize loud music events in the park and picket the wall, but they actively sought the attention of the mass media. Newspaper coverage was given to their protest, and the local radio station broadcast several interviews with the activists where they could make their case. Through consistent action and public pronouncements over a period of time they convinced themselves that 'the wall had to move', and created a climate of opinion where people paid attention to the issue and reconsidered the arguments. Finally a majority spoke out against Mr Wall at a town hall meeting. A determined group of activists managed to set the agenda in Sunnyville and reframe the issue: the 'threat to community peace' became 'a scandal in Sunnyville'. In the research literature this dynamic is analysed as agenda setting (McCombs and Shaw, 1993) and issue framing (Entman, 1993; Scheufele, 1999).

Media effects research, a historical spinoff from social psychology, has moved on to become part of a new discipline – media and communication studies – and one looks in vain for work on media effects in recent handbooks of social psychology. However, it is necessary to articulate the reality of mass communication for a theory of social influence; otherwise social influence research will have limited relevance beyond passing exams. The recent handbook literature on social influence (Cialdini and Trost, 1998; Chaiken, Wood and Eagly, 1996; Martin and Hewstone, 2001, 2003; Miller and Prentice, 1996; Petty and Wegener, 1998) reduces this field of many paradigms to a cognitive theory of dual information processing: central and peripheral. The 'cognitive miser' follows the principles of 'least effort' (Petty and Cacioppo, 1986) and 'sufficiency' (Chaiken, 1987) when seeking a judgement upon being exposed to the images and soundbites of product advertising. Experiments abound, even automated via computer and internet, in an attempt to construct 'sticky' messages cued and clued up for particular groups of respondents. The attitude change appears to happen in isolated minds, taking for granted the moral community that constitutes these individual dupes in the first place (see Taylor, 1989). This unfortunately reflects the discipline's consensus (see also Martin and Hewstone, 2003) which is unable to appreciate the formation of norms and values. Norms and values are given constraints on information-processing, even genetically hard-wired (as in evolutionary psychology). Other people are bundles of emitted stimuli that are processed *either* with conscious effort, systematically and centrally, elaborating the registered messages as arguments, or peripherally, as heuristic and effortless processing of cues of recognition and of clues of allegiance. It is suggested that majority stimuli operate peripherally, while minorities stimulate central processes (Eagly and Chaiken, 1993). The theoretically ambitious reader of social psychology looks in vain for guidance on how norms and artefacts, minorities and majorities, conformity and dissent, persuasion and manipulation, authority and obedience, central and peripheral processing might be part and parcel of social influence.

Persuasion and social influence by norms and artefacts

The final question arises, how can the social psychological paradigms of compromise, obedience and compliance, conformity and conversion be generalized from norms to artefacts? Needless to say, new ideas and things are invented, prototyped and standardized (normalized); they spread and are redesigned under majority and minority influences, and scientific and expert authorities play a crucial role in this process, and so do the mass media. If norms go through cycles of change and require legitimacy, so do artefacts.

A theory of social influence might be best located within a theoretical context of conflict resolution by mutually accepted constraints. Norms and artefacts are constraints in a double sense, enabling as well as inhibiting social interactions, framing and guiding actions. Chaos and arbitrary force is the alternative. Humans command several ways of resolving conflicts: by violence (e.g. brute or military force), by appeal to authority (courts or epistemic authorities), and by negotiation. A theory of social influence might model the modalities of the latter under the presumption of non-violence.

Social psychology has traditionally considered social influence and persuasion, a distinction that is not entirely clear. In the textbook literature social influence falls within the dynamics of groups that are structured into majority and minority segments, while persuasion refers to individual information-processing in the context of attempted attitude change. Their relationship is theoretically unclear beyond the common outcome: attitude change. Social influence assumes normative and information processes, while persuasion mainly information processes. For our present purposes it might be useful to use social influence as the generic term, and define persuasion as the 'morally sound' form of social influence. This allows us to flag up the sense of a moral boundary that pervades much research on social influence and persuasion, namely the distinction between legitimate and illicit means. The boundary between persuasion and manipulation is fuzzy, where manipulation denotes the use of illegitimate means of social influence. To cite an example: difficult negotiations are conducted with good food, wine, music and dance performances, and much 'scene setting' which aims at disposing parties to be persuaded more easily. Clearly people are persuaded by arguments under certain circumstances, so setting these circumstances becomes part of the process; but where is the boundary between legitimate and illicit setting of the scene?

This ties the theory of social influence into the discussions on the modern public sphere of communicative actions (see Habermas, 1981, 2001), where persuasion and influence take place shielded from violence – 'the gun is taken out of politics' to use a phrase from the Northern Ireland conflict – and the recourse to authority is only a last resort (Personnaz and Personnaz, 2001). The defining characteristics of a public sphere are inclusiveness and a code of conduct oriented on a counterfactual ideal: the simultaneous evaluation of claims made on truth, rightness and sincerity. The distinction between illocutionary and perlocutionary speech acts marks the boundary between legitimate and illegitimate means, between strategic and communicative action: people abstain from deception and self-delusion and 'participants have to mean what they say' (Habermas, 2001: 34). Manipulation is 'strategic' in that it

restricts truth claims exclusively to either what is true, what is right or what is sincerely held in isolation and specialization. What then counts is exclusively 'sound science', or legalism, or the politically correct motive, never mind the outcome. The 'all for one and one for all' of the three musketeers, echoing the triad of *logos*, *pathos* and *ethos*, the classical rhetoric of the arena (see Hoeffe, 2003), is separated for manipulative purposes.

In any real public sphere, representations are made under conditions of either power asymmetry or symmetry. With all parties equally empowered, the outcome will be 'normalization' through deliberation and compromise. If the parties are unequal, either A-the-stronger will urge B-the-weaker to conform, comply and act like As (assimilation), or B-the-weaker will manage to convert the As to recognize, think and act a bit more like Bs (accommodation). Ironically, in order for B-theweaker to be successful, the discipline of the active minority must be enforced by conformity pressures; successful accommodation implies local assimilation. In this way it might become possible to see normalization, assimilation and accommodation as phases of collective learning by structural change. Indeed, Duveen (2001) pointed to a structural analogy between Piaget's concept of 'genesis' in child development – the child balances the tensions of pretend play (assimilation) and schematic change (accommodation) with a series of spurts – and the 'genesis' of social representations and groups with one crucial difference: for the latter one has to relinquish the notion of directedness. The telos of the child is to become an 'adult'. However, there is no longer a reasonable way to conceptualize 'adulthood' for social groups and their mentality. This is where the concept of 'social representation' leaves behind much of the Comtean Positivist baggage (see Jovchelovitch, 2006). Social representations theory contributes to a theory of social change without a telos towards a point of culmination, e.g. the secular republic or the nation-state, while it remains within the remit of this theory to see how teleological notions might play a role as ideological content, for example in the tropes of change such as 'secularization', 'progress', 'scientific-technological revolution'. These tropes are powerful appeals that fuel the process of change, but they are not valid descriptions of the process itself.

I hope I have made the case that we need to consider the social influence of things and artefacts just as we do with norms and attitudes. Norms and artefacts are social representations that make and break social influence. Over the last 20 years, research in technology studies has amply demonstrated how artefacts are designed to influence behaviour, not, however, without conflict over how to conceptualize this. Artefacts have a history and as such are the continuation of politics with 'other' means; while 'other' might falsely suggest 'means outside politics'. Only the unreflective and biased mind considers a new regulation as a provocation, but a new technology as a case for celebration.

Social influence works with inter-subjectivity and inter-objectivity. Taking up this challenge will have theoretical and practical consequences. It might finally resolve the puzzle of how social representations and social influence are theoretically linked; and it will allow social psychologists to consider new technologies in the making and not just post-festum, as the attitude object 'fallen like pennies from heavens' about which opinions may differ. Social psychology and other social sciences will be enabled to look at the process of making and breaking of artefacts, and transcend the

traditional role of encouraging social conformity to already established facts. This extends the relevance of social psychology and preserves into the 21st century its rich tradition of research into social influence.

Acknowledgements

I should like to thank Ivana Marková for comments and guidance on this paper, the colleagues of the Paris workshop of November 2005, and my LSE students on the PS439 'Science, Technology and Resistance' course who read earlier drafts of the paper and commented on it directly and indirectly.

Martin W. Bauer London School of Economics

References

- Amann, M., ed. (2005) Go.Stop.Act Die Kunst des kreativen Strassenprotests. Grefenau-Frankfurt: Trotzdem Verlag.
- Anders, G. (1980) Die Antiquiertheit des Menschen, vol. 2. Munchen: C. H. Beck, 2002.
- Asch, S. E. (1952) Social Psychology. Englewood Cliffs, NJ: Prentice-Hall.
- Bauer, M. (1995) 'Towards a Functional Analysis of Resistance', in M. Bauer (ed.), Resistance to New Technology. Cambridge: CUP.
- Bauer, M. W. (2002) 'Arenas, Platforms and the Biotechnology Movement', *Science Communication*, 24(2): 144–61.
- Bauer, M. W. (2005) 'The Mass Media and the Biotechnology Controversy', International Journal of Public Opinion Research [edited special issue], 17(1): 5–22.
- Bauer, M. W. and Gaskell, G. (1999) 'Towards a Paradigm for Research on Social Representations', Journal for the Theory of Social Behaviour, 29(2): 163–86.
- Bauer, M. W. and Gaskell, G., eds (2002) *Biotechnology: The Making of a Global Controversy*. Cambridge: CUP.
- Blass, T., ed. (2000) Obedience to Authority: Current Perspective on the Milgram Paradigm. Mahwah, NJ: Erlbaum.
- Boehme, H. (2006) Fetischismus und Kultur. Eine andere Theorie der Moderne. Hamburg: Rowohlts.
- Boesch, E. E. (1997) 'The Sound of a Violin', in M. Cole, Y. Engeström and O. Vasquez (eds), Mind, Culture and Activity. Seminal Papers from the Laboratory of Comparative Human Cognition, pp. 164–84. Cambridge: CUP.
- Breeze, D. J. (2000) 'Artefacts and Monuments: The Building Blocks of Identity', in J. M. Fladmark (ed.), Heritage and Museums: Shaping National Identity, pp. 183–9. Shaftesbury: Donhead Publishing.
- Brey, P. (2005) 'Artifacts as Social Agents', in H. Harbers (ed.), *Inside the Politics of Technology*, pp. 61–84. Amsterdam: University Press.
- Cialdini, R. B. and Trost, M. R. (1998) 'Social Influence: Social Norms, Conformity, and Compliance', in D. T. Gilbert, S. T. Fiske and G Lindzey (eds), *The Handbook of Social Psychology*, 4th edn, Vol. 2, pp. 151–92. Boston: McGraw-Hill.
- Camus, A. (1965) 'L'homme révolté', in Essays, Bibliothèque de la Pleiade. Paris: Editions Gallimard.
- Chaiken, S. (1987) 'The Heuristic Model of Persuasion', in M. P. Zanna, J. M. Olson, C. P. Herman (eds), Social Influence: The Ontario Symposium, vol 5, pp. 3–39. Hillsdale, NJ: Erlbaum.
- Chaiken, S., Wood. W. and Eagly, A. H. (1996) 'Principles of Persuasion', in E. T. Higgins and A. W. Kruglanski (eds), Social Psychology: Handbook of Basic Principles, pp. 702–43. New York: Guilford Press.

- Cranach, M. von (1996) 'Towards a Theory of the Acting Group', in E. Witte and J. Davis (eds), Understanding Group Behaviour, vol. 2: Small Group Processes and Personal Relations. Hillsdale, NJ: Lawrence Erlbaum.
- David, P. A. (1985) 'Clio and the Economics of QUERTY', American Economic Review, 75: 332-37.
- Duveen, G. (2001) 'Genesis and Structure: Piaget and Moscovici', in F. Buschini and N. Kalampalikis (eds), Penser la vie, le social, la nature – Mélanges en l'honneur de Serge Moscovici, pp. 163–74. Paris: Editions MSH.
- Eagly, A. H. and Chaiken, S. (1993) *The Psychology of Attitudes*. Forth Worth, TX: Harcourt Brace College Publishers.
- Entman, R. M. (1993) 'Framing: Towards Clarification of a Fractured Paradigm', *Journal of Communication*, 43: 51–8.
- Farr, R. (1984) 'Social Representations: Their Role in the Design and Execution of Laboratory Experiments', in R. M. Farr and S. Moscovici (eds), *Social Representations*, pp. 125–47. Cambridge: CUP.
- Farr, R. (1983) 'Wilhelm Wundt (1832–1920) and the Origins of Psychology as an Experimental and Social Science', British Journal of Social Psychology, 22(4): 289–301.
- Festinger, L. (1983) The Human Legacy. New York: Columbia University Press.
- Fogg, B. J. (1998) 'Persuasive Computers: Perspectives and Research Directions', CHI 98, Computer and Human Interaction Conference, Los Angeles, 18–23 April, pp. 225–32.
- Frese, M. and Zapf, D. (1994) 'Action as the Core of Work Psychology: a German Approach', in M. D. Dunnette, L. M. Hough and H. C. Triandis (eds), *Handbook of Industrial and Organizational Psychology*, vol. 4, 2nd edn, pp. 271–340. Palo Alto, CA: Consulting Psychologists Press.
- Gibson, J. J. (1977) 'The Theory of Affordances', in R. Shaw and J. Brandsford (eds), *Perceiving, Acting and Knowing: Toward an Ecological Psychology*, pp. 67–82. Hillsdale, NJ: Erlbaum.
- Ginneken, J. van (1992) Crowds, Psychology and Politics, 1871–1899. Cambridge: CUP.
- Habermas, J. (1962) Strukturwander der Oeffentlichkeit. Frankfurt: Suhrkamp, 1990.
- Habermas, J. (1981) Theorie des kommunikativen Handelns, Vols 1 and 2. Frankfurt: Suhrkamp.
- Habermas, T. (1999) Geliebte Objekte. Frankfurt: Suhrkamp.
- Habermas, J. (2001) 'From Kant's "Ideas" of Pure Reason to the "Idealizing" Presupposition of Communicative Action: Reflections on the Detranscendentalized "Use of Reason", in W. Rehg and J. Bohman (eds), *Pluralism and the Pragmatic Turn: Essays in Honor of Thomas McCarthy*, pp. 11–40. Cambridge, MA: MIT Press.
- Hoeffe, O. (2003) Aristotle. Albany, NY: SUNY Press.
- Hovland, C. I. (1959) 'Reconciling Conflicting Results Derived from Experimental and Survey Studies of Attitude Change', *The American Psychologist*, 14: 8–17.
- Joerges, B. (1988) 'Technology in Everyday Life: Conceptual Queries', Journal for the Theory of Social Behaviour, 18(2): 219–30.
- Joffe, H. (2003) 'Risk: From Perception to Social Representation', British Journal of Social Psychology, 42: 55–74.
- Jovchelovitch, S. (2006) Knowledge in Context: Representation, Community and Culture. London: Routledge.
- Keane, W. (2003) 'Semiotics and the Social Analysis of Material Things', *Language and Communication*, 23: 409–25.
- Latour, B. (1994) 'On Technical Mediation Philosophy, Sociology, Genealogy', Common Knowledge, 3: 29–64.
- Latour, B. (1996) 'On Inter-objectivity', Mind, Culture and Activity, 3: 228-45.
- LeBon, G. (1895) Psychologie des foules. Paris: Alcan.
- Lynch, A. (1996) Thought Contagion: How Beliefs Spread through Society. New York: Basic Books.
- Maass, A. and Clark, R. D., III (1984) 'Hidden Impact of Minorities: Fifteen Years of Minority Influence Research', *Psychological Bulletin*, 95(3): 428–50.
- McCombs, M. E. and Shaw, D. L. (1993) 'The Evolution of Agenda Setting Research: Twenty-five Years in the Marketplace of Ideas', *Journal of Communication*, 43(2): 58–67.
- Mackey, C. (1841) Memoirs of Extraordinary Popular Delusions. New York: Random House (re-edited by Andrew Tobias) 1980.

- Martin, R. and Hewstone, M. (2001) 'Conformity and Independence in Groups: Majorities and Minorities', in M. A. Hogg and S. Tindale (eds), *Blackwell Handbook of Social Psychology: Group Processes*, pp. 209–34. Oxford: Blackwell.
- Martin, R. and Hewstone, M. (2003) 'Social Influence Processes of Control and Change: Conformity, Obedience to Authority, and Innovation', in M. A. Hogg and J. Cooper (eds), *The Sage Handbook of Social Psychology*, pp. 347–66. London: Sage.
- Milgram, S. (1974) Obedience to Authority. New York: Harper & Row.
- Miller, D. T. and Prentice, D. A. (1996) 'The Construction of Social Norms and Standards', in: E. T. Higgins and A. W. Kruglanski (eds), *Social Psychology: Handbook of Basic Principles*, pp. 799–829. New York: Guilford Press.
- Moscovici, S. (1976) Social Influence and Social Change. London: Academic Press.
- Moscovici, S. (1985) 'Social Influence and Conformity', in G. Lindzey and E Aronson (eds), Handbook of Social Psychology, 3rd edn, vol. 2, pp. 347–412. Reading, MA: Addison-Wesley.
- Mugny, G. and Perez, J. A. (1991) The Social Psychology of Minority Influence. Cambridge: CUP.
- Mueller-Freienfels, R. (1930) Allgemeine Sozial und Kulturpsychologie. Leipzig: Johann Ambrosius Barth.
- Mueller-Freienfels, R. (1936) Psychologie der Wissenschaft. Leipzig: Johann Ambrosius Barth.
- Noelle-Neumann, E. (1990) 'The Theory of Public Opinion: The Concept of the Spiral of Silence', Communications Yearbook, 14: 256–87.
- Norman, D. A. (2004) Emotional Design: Why We Love (or Hate) Everyday Things. New York: Basic Books.

Paicheler, G. (1988) The Psychology of Social Influence. Cambridge: CUP.

- Personnaz, M. and Personnaz, B. (2001) 'Influence sociale: Contextes democratique, conceptions et enjeux, in F. Buschini and N. Kalampalikis (eds), Penser la vie, le social, la nature – Mélanges en l'honneur de Serge Moscovici, pp. 301–316. Paris: Editions MSH.
- Petty, R. E. and Cacioppo, J. T. (1986) Communication and Persuasion: Central and Peripheral Routes to Attitudes Change. New York: Springer.
- Petty, R. E. and Wegener, D. T. (1998) 'Attitude Change: Multiple Roles for Persuasion Variables', in: D. T. Gilbert, S. T. Fiske and G. Lindzey (eds), *Handbook of Social Psychology*, 4th edn, Vol. 1, pp. 323–90. Boston: McGraw-Hill.
- Rothman, S. (1990) 'Journalists, Broadcasters, Scientific Experts and Public Opinion', Minerva, 28: 117–33.
- Sears, D. O. (1986) 'College Students in the Laboratory: Influences of a Narrow Data Base on Social Psychology's View of Human Nature', *Journal of Personality and Social Psychology*, 51: 515–30.
- Scheufele, D. A. (1999) 'Framing as a Theory of Media Effects', Journal of Communication, 49: 103-21.
- Sherif, M. (1936) The Psychology of Social Norms. New York: Harper
- Sloterdijk P (2005) Im Weltinnenraum des Kapitals. Frankfurt: Suhrkamp.
- Taylor, C. (1989) Sources of the Self: The Making of Modern Identity. Cambridge, MA: Harvard University Press.
- Tarde, G. (1990) Les lois de l'imitation. Paris, Alcan (re-edition).
- Valente, T. W. & Rogers, E. M. (1995) 'The Origins and Development of the Diffusion of Innovation Paradigm as an Example of Scientific Growth', *Science Communication*, 16(3): 242–73.
- Wagner, W., Kronberger, N. and Seifert, F. (2002) 'Collective Symbolic Coping with New Technology: Knowledge, Images and Public Discourse', *British Journal of Social Psychology*, 41: 323–43.
- Wheen, F. (2004) *How Mumbo-Jumbo Conquered the World*. London: HarperCollins.
- Winner, L. (1985) 'Do Artefacts Have Politics?' in D. MacKenzie and J. Wajcman (eds), *The Social Shaping of Technology*, pp. 26–38. Milton Keynes, Bucks: Open University Press.