High Fives to the Avant-Garde

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Abstract. This essay both explores and rationalises the role of the avant-garde in visceral design and Human-Computer Interaction by comparing the Digital and Industrial Revolutions and situating the role of 'counter-culture' practitioners as early expressers of both new cultural paradigms and new social ontologies.

Keywords: Visceral design · Experience design · Philosophy · Ontology · Emotion · Historiography · Critical history · Art · Avant-garde · Interfaces · Praxis · Design fiction · Innovation · Expressionism · Situationism · Fluxus · Subjectivity

1 I Am Not a Developer, a Computer Scientist, or an HCI Specialist

I do, however, have a very particular relationship with electronic technology and computing: I hate it. Don't get me wrong, it's not like I have some deep seeded luddite compulsions (at least I don't think I do). My strained relationship with technology is born out of inadequacy: I'm crap at it. Perhaps it is karma, but despite this fact, since my childhood I've found myself consistently drawn into the world of computing and digital technologies—a world in which I should only ever really reside on the fringes. As if to remind me of my questionable abilities, I've also consistently been surrounded by people who are brilliant at it.

To counter this I developed three strong survival mechanisms: (1) I could always pull off an analogue version of whatever they were doing on the computer; (2) By necessity I watched from the sidelines and absorbed what was going on; (3) I equalised the situation by analysing, critiquing (and often criticising), and asking the right questions. In short, I survived by evolving into kind of a know-it-all jerk. So, my challenge in the next 12 pages is to figure out why a know-it-all jerk who hates technology constantly gets pulled into the discussion. How and why are us jerks necessary?

2 This Essay Is About the Avant-Garde

You'll notice that there are no capital letters on that. Here I am not talking about a particular movement (though I shall introduce one or two for discussion), rather the avant-garde I wish to explore is established around a condition of inquiry, or a particular

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relationship to naturalised paradigms. The avant-garde in this respect are the vanguard of praxis-based criticism and socio-cultural experimentation. As such, they are responsible for exploring the boundaries of socio-cultural taken-for-granteds, and defining new standards of knowledge, expression, and being. In the contemporary world where both thinking and culture (each now largely driven through relationships to media and technology) have outgrown the evaporating edifice of modernism (and arguably post-modernism) the need for the avant-garde is as strong now as any time in the past.

3 Our Story Begins in the 19th Century

Both the ethos and the mythos under which we work as contemporary academics, artists, designers, and inventors are inextricably tied to this era. This is not only the story of the avant-garde, but the story of "industry", the story of the "market economy", the story of "progress", and the story of the "future". Everything that defines the multi-billion dollar computing industry in the present, all of these related trajectories, began with the Industrial Revolution and all are re-converging at this particular point in history.

Arguably, not since the Industrial Revolution have we seen such a palpable and impactful technological shift. There is a key difference, however, between that technological revolution and this one: the currency has changed. During the Industrial Revolution the currency was "efficiency" and "intensification". Success was measured in terms of these two tangible, quantifiable variables. The Digital Revolution (within which we are still fully submerged) is driven by a different measure of success. True to digital form (or the lack thereof) there is nothing tangible here. The new currency is formless and unquantifiable. Here the world unites under a single mantra. The word we all chant is "innovation".

INNOVATION: noun in·no·va·tion \ i-nə- 'vā-shən\

- A new idea, device, or method;
- The act or process of introducing new ideas, devices, or methods;
- *The introduction of something new* [1].

Of course the concept of innovation is, in itself, nothing new. Humanity is built upon innovation. Our evolution as a species is dependent upon it. The issue at the present time, however, is that the word "innovation" has no qualifier. We are no longer innovating for the sake of efficiency or intensification. We are not trying to be faster, less destructive, more destructive, or any other variable of impact. Innovation for us has no meaning. It is merely a measure of newness and newness is now the only standard of contemporary market relevance.

The market demand for innovation today is a pressure that even the most robust companies are finding difficult to navigate. Apple, for instance, having been one of the instigators of this perennial "culture of the new" dropped \$200 billion in value in 2013, despite increasing its revenues, merely because it was turning out fewer "new" products. [2] Tangible metrics such as revenue, holdings, and liquidity have lost their measuring power. "Innovation is a wild card that trumps everything else, and it is making these old metrics obsolete" [3].

We have somehow found ourselves in the midst of a dominant cultural paradigm that has no definition. We are now expected to innovate without direction, without intention, and without cause. The action of innovation itself, or the guise thereof, is enough to both justify and signify our dedication to the pursuit. So we rally with all great enthusiasm to the battle cry of this new crusade: "Innovation today is worth more than cash—so get out there and innovate!" [4].

I'm going to take a moment to stop rolling my eyes, and ask "are we just too deep into the Digital Revolution to truly understand what's going on?" During the industrial feeding frenzy that was the 19th century was there an awareness of the significance of the paradigmatic shift that was occurring, or, like the 21st century were the stakeholders merely patting themselves on the back for their ingenuity and their penchant for progress and innovation? The answer in both cases is most certainly yes. As McLuhan [3] quipped "A wit has said we don't know who discovered water, but we're pretty sure it wasn't a fish." It would seem that we are unable to objectively scrutinise systems and environments within which we are ourselves immersed. Ironically, the sort of prescience it takes to understand what is happening at a significant cultural moment more often requires hindsight.

With hindsight, for instance, we can see through the mythology of progress pervasive during the Industrial Revolution. Polanyi [4] made this succinct distillation of the 19th century socio-economic metamorphosis:

[19th] century civilisation alone was economic in a different and distinctive sense, for it chose to base itself on a motive only rarely acknowledged as valid in the history of human societies, and certainly never before raised to the level of a justification of action and behaviour in everyday life, namely, gain.

The 19th century gospel of "progress" is thus exposed as mere packaging which helps facilitate the paradigmatic shift to a value of individual wealth. The question is, however, is our current day mythology of innovation any different from the 19th century rationalisation of progress? More importantly, what underlying motivations will expose themselves as the impetus of the ongoing Digital Revolution? Are we still motivated only by gain (how horrifically derivative if that is the case), or is there some other fundamental cultural value at play that we have yet to recognise?

4 This Value Is the Future

For the masses in the eighteenth century who knew little outside of their agrarian lifestyles few could imagine a situation any different, let alone anticipate a world on the verge of the most rapid change in all of human (pre)history. In the present world we are hard pressed to conceive of the shear amount of change that might occur even within the next five years. While the future was a concept of little consequence in the pre-industrial world, now there are few concepts which can rival its importance. The idea of the "future" that now pervades our collective consciousness existed largely only in the heads of exceptionally visionary individuals: Leonardo da Vinci and Francis Bacon come to mind. With the advent of the Industrial Revolution the spark of "the future" was ignited and thus began its incursion into the popular psyche.

Changes in technology bring about changes in society. "It's translation. It's a loop. You shape your tools in your own image and, in their turn, they shape you." [5] The Industrial Revolution, for the first time on a widespread scale, saw a change in technology bring about more than just a change in regime. Cultures morphed and societies shifted. The cause and effect was obvious, and the potential impact human technological agency could make on the world was transparent. What does it mean when popular consciousness swaps the assumption that cultural life will remain essentially the same in perpetuity for the assumption that cultural life will and must change, even substantially, in one's own lifetime? Suddenly an imagined future is born; implicit within this is imagined technological advancement. By the turn of the century artists were conjecturing about and visualising a future world of dressing machines and automated tailors a hundred years hence [6].

The impact of an imagined future is profound. I will posit here that this is one substantial departure the Digital Revolution takes from the Industrial one: while efficiency and intensification brought about progress and gain in the 19th century, now in the 21st innovation not only results in gain, more importantly it substantiates our abilities to manifest our imagined futures or imagine "better" ones. Hence, deep down, we measure our successes in how closely we approximate our science fictions—right down to our Jetson's inspired videophones. When revenues go up, but Apple stocks go down the market is signaling that gain is not the measurement of worth, rather it is the ability of companies to deliver the future.

5 There Is One Last Invention of the Industrial Revolution to Discuss

The sweeping social and cultural consequences of industrialisation took many guises. Populations shifted to urban centres, cultural life and occupations became more compartmentalised and specialised, money flooded into the new middle classes and an emerging class of labourers (as opposed to peasants) was being born. Most importantly, people were discovering that the future could change. Technology was opening up an unimaginable expression of agency. If people could now envision new technological futures, people could also imagine new social ones. As such, the avant-garde was coming into play.

The avant-garde is first and foremost a military term alluding to those at the front lines of battle. The term materialises with strong political connotations after the French Revolution pre-anticipating the emerging proletarian consciousness of the 19th century. By 1825 the term is used as an intellectual and artistic call to arms:

It is we, artists, that will serve as your avant-garde; the power of the arts is indeed the most immediate and the fastest. We have weapons of all sorts: when we want to spread new ideas among the people, we carve them in marble or paint them on canvas; we popularise them by means of poetry and music [7].

Artists, writers, and musicians, were already held in close association with the intelligentsia of the time. Those who were not directly radicalised through republican and socialist politics, were still caught at the forefront of negotiating the host of new

cultural influences. Pre-industrial artistic fixations on representation and realism segued to a new experimentalism in form, function, and material. The pressure to balance the wholesale adoption of technologies and commodities by the masses with a critical artistic engagement that questioned the impact of these new cultural phenomena often placed the artist in contrast and opposition to the mainstream.

An avant-garde is a concrete cultural phenomenon that is realised in terms of identifiable (though never predetermined) practices and representations through which it constitutes for itself a relationship to, and a distance from, the overall cultural patterns of the time [8].

6 Focus 1: Expressionism

The avant-garde spawned a long pedigree of such movements throughout the late 19th and early 20th centuries. I will forego the Art History lecture at this time and focus instead on three examples through which we can explore the historical avant-garde as well as contemporary analogues relevant to visceral design. Expressionism, as a for instance, privileges the emotional expression, subjectivity, and individual condition of the artist rather than realism or form. Matisse, for instance, chose his colour palette, gestures, and stroke style not to capture a particular scene, but to emote a particular sentiment. "My choice of colors is based on observation, on feeling, on the very nature of each experience... [I] merely try to find a color that will fit my sensation" [9].

Art is no longer merely representative, narrative, nor necessarily tied reverentially to religion or hierarchy. It is, instead, interpretive, expressive, experimental, and increasingly visceral. It flies directly in contrast to what we may observe objectively in our day-to-day lives; it begins to endorse a sentiment of affective, emotional, and individualised experience. Art becomes a device for manifesting alternate realities, states of being, states of feeling, first on behalf of the artist, but then, by implication, for the audience. This is significant at the time because art controlled the image, and image, being the only representation outside of an objective material reality, controlled popular imagination.

The Case Study: Blinklifier | Tricia Flanagan [10]. Blinklifier is a wearable technology headdress that converts eye gestures, through conductive inks or stickers in the user's eye makeup, into data driving LED visualisations that amplify non-verbal communication. Imagine a fashionable, futuristic, Princess Leia-type character. Her eyes are accentuated with dark pigments harkening to ancient Egypt; her head adorned with a large loop of what looks at the same time like woven textile and metal. Visually the loop extends the face doubling or tripling the radius of the face's presence. It intersects with the head just above the cheekbones drawing the eye of the viewer to the face's most expressive features. The dark electro-conductive eye makeup closes the circle. Even before the device has fully engaged with its full technological capacity it is already multiplying the body's expressive proportions. When fully implemented the headdress illuminates according to the blinking and other eye gestures of the wearer.

Blinklifier enriches our emotional dialogues and manages our social relations through blinking. It follows the natural eye muscles contraction and extends the motion into a visible light array. It responds to the specific eye movement patterns of the wearer and amplifies emotions that the wearer wants to communicate by presenting noticeable, exaggerated visual compositions [11].

Blinklifier transcends the boundaries of traditional wearable technology. The emphasis is not on coupling the user to information input or output systems like a computer or a monitor. On the contrary, Blinklifier is an expressive system that connects the internal state of the user, through an embodied experience, with the outside world. It is not adornment, but an expression or translation of the inner state of its now 'cyborg' companion. The technology only has meaning within its articulation with the body and the subjective and/or unconscious desires of its wearer.

In the same way as the Expressionists of the early twentieth century, rejected the literal constraints of form and narrative *Blinklifier* dismisses the universal objectivity of data systems in favour of a subjective and affective exchange between user (performer) and audience. The project anticipates through design fiction a day where technology must compensate for the alienation of the constant flow of neutral and meaningless data.

7 Focus 2: The Situationists

The example of Expressionism also serves to underline the fact that the art historical pigeon-hole of the "Avant-Garde" was by no means prescribed, cohesive, nor monolithic. Individual movements coexisted, contradicted, supported, and contested one another. Expressionism was heavily criticised for focusing the gaze upon the "interiorization of reality," [12] both obscuring and mystifying contemporary social issues and therefore laying a foundation for a right-wing propagandist appropriation of the image. [13] The concern was that rather than keeping vigilant of shifting socio-political power relations the proletariat were increasingly distracted with internalised emotional engagements.

We see this focus on the distraction of the image becoming a growing preoccupation in Marxist critique. While Expressionism was being normalised through its adoption by a variety of social institutions, be they governments, popular media, and a burgeoning marketing industry, a new avant-garde, the Situationist International, was defining itself in opposition to a rapidly developing culture fixated on the image and the commodified object. Guy Debord, one of the movement's *de facto* spokespeople signals the shift in the human experience from being, to possessing, and then from possessing to appearing. Life, once grounded in lived (visceral) experience, then mediated through the physical object, was now merely a performance of shifting identities and deeply subjective, individualised knowledge.

The whole life of those societies in which modern conditions of production prevail presents itself as an immense accumulation of spectacles. All that once was directly lived has become mere representation.... The spectacle is not a collection of images; rather, it is a social relationship between people that is mediated by images [14].

With a sort of McLuhanian prescience, Debord's words foretell and perhaps describe our current cultural climate more accurately than the world of 1967, when his

article was first published in French. There is no denying the impacts of pervasive media and technology, nor the dual, mutually embedded existence we now live between material and virtual environments. Harris [15] underlines this observation with a snapshot of contemporary culture that would surely make Guy Debord shudder:

I always picture the archetypal modern crowd: squeezed up against each other, but all looking intently at the blinking screens they hold in their hands, while their thumbs punch out an imitation of life that surely proves Debord's point ten thousand times over.

The strategy adopted by the Situationists was the deployment of "situations". By this they meant a sort of authentic experience, an intervention in which the audience was located in a material, sensory engagement with their physical environment. The emphasis was on embodiment, presence, and phenomenology. In Debord's [16] own words:

Our central idea is the construction of situations, that is to say, the concrete construction of momentary ambiences of life and their transformation into a superior passional quality. We must develop a systematic intervention based on the complex factors of two components in perpetual interaction: the material environment of life and the behaviors which that environment gives rise to and which radically transform it.

The Case Study: The Agora | Kurtis Lesick, Paul Robert, Craig Fahner, and Angus Leach [17]. If Blinklifier can be seen as an analogue of Expressionism liberating the body from the alienation of data and re-forging a connection between the individualised, subjective, and emotional worlds of social agents, the Agora harkens to the Situationists grounding social media not as a performance of identity, but as a negotiation of community dynamics located in a physical, experiential space. The Agora is a critical making project deconstructing both social and news media under the premise that the current social media paradigm encourages a detachment from a critical and negotiated social engagement. Society is therefore a performance of "social acting" rather than "social action". The project takes as its foundation five observations of mediated life:

- It rests on the ability to be seen or heard, not to be understood;
- It is predicated on the ability to have an opinion at any time, in any place;
- It privileges opinions based on "likes," trends, and popularity rather than the negotiation of the common good;
- It revolves around the performance of individual identities, rather than the negotiation of social consensus;
- Thus it is not embedded in discourse, but in consumption [18].

The project responded by creating a mediated social exchange that reversed all of these assertions. Rather than ubiquitous access communication was located in time and space; rather than a performance of identity contributions were anonymous; rather than talking about yourself, you talked about shared issues and common identities. The project was paper-tested over six months on a large 9 foot \times 6 foot mobile wall and a seemingly endless supply of sticky notes in the main mall of the Alberta College of Art and Design (ACAD). With the simple call to action, "What should ACAD be talking

about," participants were invited to submit comments simply by writing them on a sticky note and placing them on the wall.

After the six month trial the paper-test was adapted for digital deployment using a screen-wall accessed wirelessly through any networked device over a local area network. We repurposed twitter colonising their short message system for use as digital sticky notes. Rather than sending messages out into the digital aether, however, we closed the feedback loop. A single twitter account, @acadagora, sent messages only to itself. In the *Agora*, there is only one identity being negotiated, that of the community. All individual opinions are digested into the system and equalised. Those "healthy" conversations with deep and sustained discussion endured, whereas the noise of performative chatter quickly dissipated.

The *Agora*, in itself, is not visceral computing. There are no sensors, no haptics, no body interaction. By locating it firmly in the social geography of ACAD and removing the distraction of identity performance, however, we transform what was once a virtualised data repository into a fully materialised and meaningful social engagement. The system becomes more than a computer interface, it becomes a lived situation bounded firmly in time and space and mediated only by praxis.

8 Focus 3: Fluxus

Rather than explaining what Fluxus is, it is easier to understand what Fluxus was a response to. Fluxus grew out of the same cultural trajectories as Situationism, a world in which identity and social knowledge were increasingly reliant on the image and the commodified object rather than authentic lived experiences. This was especially true in relation to Art (with a capital 'A'). Now, itself, an institution and an industry, Art in its post war context, was seen as having fallen victim to the pressures of commodification and commercialisation. Fluxus was to bring (A)rt back to the people grounding it in the concrete experiences of daily life. "Coffee cups are no less beautiful than the most exalted of sculptures, a kiss as dramatic as the Liebestod, the slosh of water in wet boots is not to be invidiously distinguished from organ music." [19] Fluxists drew their audiences into their work through, events (happenings), performances, interactions, improvisation, "do-it-yourself" aesthetics, and "kits" that implicated engaged social action. Objects derived value through their use, not through their implicit commercial value.

There are several implications of Fluxus for HCI and visceral design besides this lesson on use over commodity. Artist and "play-theorist," Flanagan [20] notes that "play and 'the joke' evolved as a methodology, bringing a level of interaction and audience participation away from the galleries and traditional theatre environments and creating for the first time multi-user artistic environments." O'Neill and Benyon [21] likewise note that Fluxus artists were playing with semiotic and rule-based systems to help guide participants through happenings and intermedia events while still providing for an open-ended, subjective, and even non-prescriptive experience. This emphasis on meaning-play, subjective and affective experience, and embodied, material interactions makes Fluxus a productive metaphor for visceral, qualitative explorations in computing.

The Case Study: A Machine to See with | Blast Theory [22]. A Machine to See With blurs the line between theatre, cinema, and games. While being defined as a media project, the piece actually serves to invert the traditional relationship between the viewer/consumer of media and the media being consumed. Rather than producing a single linear narrative property that is then distributed to multiple passive audience members, the project creates a framework for an experience that is enacted by the audience in the "real" world. The authority and objectivity of "the screen" thus fades away. Instead, the medium through which the audience sees the story is their own eyes; each version of this cinematic piece is completely idiosyncratic to each audience member. Thus, not only is each "screening" of the piece different, so is each individual viewing.

In *A Machine to See With* each audience member opts-in through their cellular phone to a participatory narrative about an impending bank robbery. They are given an address at which to rendezvous. When they arrive their phone rings; they receive their first set of auditory director's notes:

By taking part in 'A Machine to See With' you agree to take responsibility for your own safety. If the police are called they will not take any notice of your excuses. Everything around you is just pretend. It's all made up [23].

The piece is augmented reality in its truest affective form. Rather than relying on technology for the augmentation, however, Blast Theory overlays an open ended contextual narrative. Both the visual and experiential environments are real; the characters are real people making real decisions in real time. The only fiction is the context through which they are all brought together into this modern day happening. With *A Machine to See With*, rather than mediating the narrative, the mere suggestion of mediation has the audience questioning how much of their "authentic" lives is now a performance lived through a frame of reference to the ubiquitous media screen. The actions of the everyday not only take on new meaning and a cinematic significance through this contextual sleight of hand, they necessitate a whole new and original phenomenology for each participant.

What is the interface in this project? Is it the user's phone through which she or he receives the contextual narrative? Is it the physical environment through which the audience navigates and defines the flesh and bones of the experience? Is it the other participants, embedded in their own experiences, who in their interaction with other audience members bring this piece of cinema to life? Is it the uninformed bystanders unwittingly playing extras in this lived fiction as their real lives cross over in time and space with the narrative? I would contend, that perhaps in this case the interface is dead. The lines have been so blurred between mediated and lived reality, body and interface, that all become one. Hence, truly visceral design is not about interface at all, it is about deployment. The measure of affective quality is not in terms of an embodied interaction with the interface, it is in the embodied interaction with the experience as a whole. The lesson here is not a technological one, it is an experiential one.

9 I Apologise: This Essay Was Supposed to Be About You

This essay was written for the HCI International Conference, for a session on Visceral Design, and I made it all about myself. I told you about my dysfunctional relationship with computing; I got on a rant about the strange socio-economic pressures that I see affecting research and design in computational systems; I had to go back to the Industrial Revolution and rationalise that while we've been through much of this before, there are critical contexts that make the Digital Revolution something significantly new; I had to draw parallels between the (r)evolution of industry, technology, the market economy, ideology, art, and the nature of how we experience, perform, and understand our lives; and, worst of all, instead of talking about technological interfaces that physically connect with the body I've focused on projects that are more systemic in nature, where the meaning doesn't come from our interactions with an interface, but how technology blurs with both the body and the physical engagement with lived experience. The interface might be a red herring: maybe visceral design is about facilitating embodied social engagements, not technological interactions. Maybe I really am a jerk.

10 Are Us Jerks Really Necessary?

In a nutshell, no, I don't think jerks are necessary. It doesn't take me to push the boundaries of HCI and computing. Is the avant-garde necessary? The answer is ABSOLUTELY. As we've seen above in the examples of avant-garde movements in art and analogous practices in contemporary technology and experience design, the avant-garde is not merely difference for difference sake; practitioners are not merely swapping variables to achieve the much valued and much illusive "innovation" prize. The avant-garde disrupts epistemological conventions and ontological assumptions. Without them we remain in a self-referential loop incapable of thinking through boundaries and barriers. Avant-garde thinking, while having the appearance of originating from the fringes or outside the system in question, actually develops as a first response to cultural pressures already at play. The Expressionists weren't concerned with the "new". They were responding to individualising pressures that needed to be rationalised in artistic praxis in order to be made sense of. The Situationists were grounding ontology back into social action not just to be contrary and counter-cultural. They were exposing a theorised growing sense of alienation by offering an effective experiential alternative. Fluxus didn't deviate from the institution of Art to forge a new sense of fashionable authenticity. It was the natural progression and natural expression of changing paradigms of the subjective and individual construction of reality. To sum up, the avant-garde is not defined by the invention of different ideas, it is the early expression of new systems of being. As such, the identification and exploration of new avant-garde trends is essential for rationalising socio-cultural pressures and changes within which we are so immersed that they are hard to identify.

We don't just wake up and decide to be avant-garde. We bring baggage into our practice as a form of response to these socio-cultural pressures requiring rationalisation. By implementing these in our practice we begin to test and manifest ideological and

theoretical changes at an ontological level. Hence the hallmark of avant-garde practice is experimentation and rationalisation through praxis. As we have seen in our examples, both old and new, the avant-garde doesn't introduce new thinking, they are merely the first wave to manifest changes in their culture through their work. I shall leave you with the words of Mathews and Wacker [24] who sum up the old and new condition of the avant-garde:

If you're a deviant you're in luck! The market has decided to look on you with favor-you actually have a chance to cash in on your weirdness. In slightly less forgiving times, deviants didn't make vice president. Instead, they were exiled, stoned to death, imprisoned in cold dark dungeons, or burned at the stake. So things could be a lot worse.

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