

Abstract:

Based on a large-scale study of immersive theatre company Punchdrunk that investigated live interactive systems, this paper turns to digital interactive systems and proposes a shift from modelling human agents as the 'moving parts' of such systems to thinking and modelling their agency as a critical material. Thinking the expression of agency in interactive systems not as a material capable of flow, volatility, reception and reaction, but through the generalised models of agents, creates systems that drive users towards identitarianism, emphasised by personalisation. Personalisation and identitarianism arguably have a casual relationship, and the consequences of incentivised identitarianism on social media platforms have been unfolding across the political spectrum since about 2010. Furthermore, these effects are amplified by scaling as the numbers of real and artificial users increase.

This paper addresses personalisation and identitarianism from the point of view of the underlying issues associated with our digital representation as agents. In more or less static form, our digital representation is stereotyped according to demographic categories and 'enriched' with predictive models based on past actions. As identitarianism is incentivised at the infrastructure level, the problem remains intransigent unless we revisit how participants and participation, as essential 'moving parts', are conceptualised, modelled and represented within interactive systems.



Punchdrunk: physical and virtual scenographies where audiences are critical 'moving parts' in interactive systems. Their modelling is critical to the function and nature of the interaction, and finds conditions of possibility within these interactive systems.

Punchdrunk

- Pioneers in immersive theatre and media since 2000
- London-based company with semi-permanent productions in New York (running 8+ years) and Shanghai
- Scenography as milieu: large, interactive physical productions (100-170 fully realised rooms/environments per production)
- Free-roaming, anonymous (masked) audiences (400-600 per night)
- Minimal supervision, instruction and rules
- Durational performances (3 x 1hr)
- A use case for functional alternatives to modelling audiences

Immersion and Participation in Punchdrunk

A framework for understanding physical and virtual scenographies that incorporate audiences as critical constituents within an interactive design schema

- Published 2019 (Bloomsbury), based on ethnographic research within the company 2011-2016,
- Punchdrunk: Sleep No More (New York), The Drowned Man (London)
- Punchdrunk Enrichment
- Genealogy of the immersive aesthetic in scenography and performance
- Discourse analyses to identify the structure of immersive experience, and how it is elicited and sustained on both sides of the interaction

A critical framework for understanding conditions of possibility in immersive design across physical and digital media through analysis of frames, subject positions and perspectives.

Agent-based modelling

Underpins targeted advertising and justifies pervasive audience tracking - largely unchallenged in HCI

- The general dominates the specific \neq 'empowerment' Deleuze (2014). *Difference and Repetition*. London: Bloomsbury.
- Systems that are designed around agents shape participation around their defined and designed role; they are reductive by definition.

Engineering-based solutions have traditionally favoured a mechanistic approach to thinking audiences as stable/predictable 'moving parts' in interactive systems. This way of thinking audiences is fundamentally flawed; platform effects alone generate circularity, and top-down modelling of agents is inescapably reductive.

Ontological shift: what 'is' an audience, for the purpose of interaction design at scale? Errors scale as systems do.

Ideological modelling vs. empirical modelling

- An individual \neq a part of a crowd
- A crowd \neq multiples of an individual
- Immanently perceived as a force in terms of density, pressure, velocity, directionality, 'temperature', consistent vs. erratic latency, etc.
- Articulating force and resistance

The identity of individual audience members is irrelevant to the function of the interactive system.

It is relevant, by way of the tension between the individual's experience of themselves and what the interactive system affords and facilitates, to the experience of each audience member. The locus of experience is situated beyond the functional and ethical bounds of interaction design: immersion is the product of a voluntary addition and 'submission' of agency to the interactive system, by individual audience members.

Shape-shifting: an expression of power

- Shape-shifting is an expression of power within distributed structures
- Shell companies, shell 'identities', transnational finances, transnational corporations - flowing at will, indeterminate in form, to optimise conditions of possibility
- Control is exercised through limiting form and movement (e.g. stereotyping, stopping freedom of movement, zoning and segregation), creating power imbalances that are analogue to the freedom of movement and change
- Defining the role of digital citizens as ever-closer defined data objects *cannot* empower (supporting Deleuze's thesis of the general vs. the specific)

Incentivisation/monetisation

- Personalisation/‘cybertyping’ forms the basis of targeted advertising as a monetisation model
- Incentives drive closer definition of system users, which, in relation to the distributed ‘formless’ influence of platform providers, creates greater power imbalances
- Resistance is logical, and driven towards:
 - challenging limits of the system (e.g. gaming, hacking)
 - ‘if you can’t beat them, join them’ self-exploitation, with notoriety and controversy being effective ways to build audiences rapidly: driving apart, undermining the centre

Agency as a material; not agents

- We do not need to know more about the agent than what is necessary and desirable in the context of the designed environment - we do not usually need to know who they are
- We *do* need to be clear about the degree of agency and type of expression that is necessary and desirable
- A working hypothesis for this position is supported by a large empirical study with Punchdrunk in physical environments, which serve as a use case for alternative audience/‘user’ modelling

Westling,

C.E.I. (2019) *Immersion and Participation in Punchdrunk's Theatrical Worlds*. London: Bloomsbury Methuen Drama.

Towards articulating force and resistance

- A post-cartesian/post-identitarian modelling paradigm for interactive systems
- Post-identitarian (Cull, 2012) in the sense of defocusing identity and its associated politics
- Modelling agency, not agents: embedding an empirical perspective on audiences within systems
- Preserve anonymity: this is critical for many reasons, including the freedom not just to expression, but primarily to dissent
- Challenge/rebuild existing monetisation models