

'The queue: network topologies and motion capture

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*All the world's a net! And all the data in it merely packets
come to store-and-forward in the queues a while and then are
heard no more. 'Tis a network waiting to be switched!*

(Vint Cerf, Internet 'Pioneer' and co-author of TCP-IP protocol)

We are segmented all around and in every direction (Deleuze and Guattari)

Lodged Abstract

Queues are one of the fundamental architectural principles of all networks. They are infinite and stochastic and yet utterly controllable. Queues are a distribution technology: they are a resource for sharing, smoothing the striations that form at thresholds and producing a particularly linear and commodified form of justice that perhaps oddly in a time of real time technologies seems to be spreading virally. Queues are a type of strange attractor, a singularity that captures the motion of a multitude and directs it into a sequence.

Queues are not new. One reads that Noah deployed the queue as method of traffic management to facilitate the transfer of animals (two by two) into the ark. Since the increase of both packeting technologies and global mobility at all scales, the queue increasingly permeates every modality. Queues are not merely technical; they cut across all dimensions and in every direction, moving seamlessly from management to morality and back again. For instance, in Australia (like many wealthy industrial nations), queues have a moral dimension, where 'to jump the queue' is indexical with impoverished moral values and antisocial civil disobedience. To call someone (typically an asylum seeker from the developing world) a 'queue-jumper' is a form of vilification. We might think then that queues not only represent a dominant technical structure but also might be seen as one of the dominant ethical indexes of contemporary life. Move but keep your place, move but stay in line. We may move more, but this movement is modulated through the technical/architectural ethos of the queue.

What you are actually getting:

This paper functions as both a first report of ongoing research on queue architecture from a technocultural perspective and a meditation on the politics and rhetorics of regimes of mobility, immobility and the evolving configurations

of movement itself. This project is data driven, comprising: still images and video of waiting lines at key thresholds, such as train stations and bus stops; audio recordings of call centre IVRS (interactive voice recordings); and people's stories of experiences in queues. I am currently developing the first iteration of an xml database containing telequeue data, with mr Snow from the *House of Laudanum*.

There is an ethnographic dimension to this project inasmuch as data is being drawn from different cities around the world (At present, Sydney, Singapore, Rome, Moscow, Beijing, Rotterdam and London). Once the data is gathered and organised. I will be working with various artists, designers and programmers to develop visualisations and audio work to assist in analysing, visualising and presenting the data. The source data will also be available online and be open to anyone who can use the material. I will be continually 'gathering data' during the progress of the conference. So I hope you don't mind if I ask to record any queue stories you may have. I'll also be bringing my laptop for show/hear and tells in the train.

The working hypothesis is that all queues represent an informationalised arrangement of bodies and/or bits. Thus I am particularly interested in exploring connections between the store and forward topologies in digital networks and those of bodies waiting in lines in place space. The paper, as a first paper of a new project, is deliberately expansive and somewhat speculative, but its transversive methods are highly motivated. Each section traverses the queue across from different angles and at different levels, ranging across the ethical implications of TCP/IP, Australian national debates around asylum seekers to the dynamics of crowds, queues and power.

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A funny kind of animal.

[Town Hall Image series: TH0707-717, 705, 1676-78]

Town Hall Station, Sydney 3.45pm on a Tuesday. The beginning of the afternoon peak hour and the traffic along the concourse begins to build. The movement of bodies is mainly bidirectional – the bulk of the traffic moving towards the entry turnstiles but a small stream of people also move against this purposeful flow, away from the trains and towards the station exits that lead to sunlight, shopping and the business district above. Occasionally clusters form and then dissolve. Someone stops midstream, perhaps to gather their thoughts, to regain orientation in the seemingly mindless flow that bifurcates around them creating an eddy effect. Sometimes the cluster appears to slow, then hardens and begins forming a tail: it becomes a queue.

Watching this movement, the flows, the stops and starts, the transient shapes coalescing, dissolving or hardening, the etymology of the term queue, from the Latin *cauda*, meaning tail, begins to press against me. Flatten the ontologyⁱ of this scene- the entries and exits, the CCTV, digital ticket scanners, the army of outsourced security guards, the bodies moving independently and yet collectively, the ticket machines, the food franchises, the news stands, and the rail network below and it forms a really interesting if monstrous animal- weirder than the mythical Hydraⁱⁱ. Here is an animal recursively nesting within itself across manifold time-spacings whose multiples heads are phantoms- when you finally reach the head you only find another tail.

These queues may appear unified- resolute in their collective stillness, steadfastly holding position amongst the milling, moving crowds. To me, the observer, each person in the queue appears somewhat blasé, preoccupied with their own tasks of text messaging, hunting for change in their bags, scanning a periodical, or just staring into space, yet each is also acutely aware of **their** position in this transitory and anonymous formation. Unknown to each other, they appear indifferent, insular in their thoughts and activities and yet their bodies are synched. If someone in the queue takes a lateral step, some kind of collectively known and viscerally sensed displacement occurs. The queue responds, realigning itself so the aberrant kink (the sidestepper) is reincorporated and smoothed back into alignment. These bodies seem to be responding to unseen commands, initiated by the viscerally felt interactions of the bodies themselves. It is a proprioceptive sensing – ' a self referential sense that registers displacements of parts of

the body relative to each other' (Massumi, p179). Preoccupied with their own tasks, but alert to each other's positions and movements. The closer one gets to the head of the queue, the more closely the bodies press together. The taboo of anonymous touch dissolves- the queue appears to take on the characteristics of Canetti's crowds, they no longer 'fear the touch of the unknown'ⁱⁱⁱ. But this is not a crowd; its potential for becoming something else is redirected into the linearity of a queue.

Wagging the dog: the queue jumper.

A dog's tail shows the courage of animal. (Konrad Lorenz, Man Meets Dog)

[40088small.jpg]

I mean we've always taken refugees and we always will. But what they are doing is queue jumping. I don't care what anybody says and they are not being held unreasonably. I mean I've heard some people describe the conditions in which they're held as concentration camps. That is insulting and demeaning to people who were held in concentration camps during World War II and it's a ridiculous and extravagant and outrageous criticism.

John Howard, Prime Minister of Australia in a radio talkback interview in 2001
<http://sievx.com/articles/psdp/20010817HowardInterview.html>

Howard again, in 2004:

Look, I took a strong position on - on border protection. And I make no apology for that. But the proof of the pudding's in the eating. The - the illegal immigration has stopped.

I mean, it worked. It was right. It protected our borders. It stopped people queue jumping. It restored order and coherence to our refugee policy. And as a result we're actually now taking more legal refugees than we were in the past, because we've stopped the illegal flow.
(Interview with Political commentator, Laurie Oakes on *Sunday August 2004*)^{iv} insert URL.

Over the past decade or so, the term 'queue-jumper' has become a significant trope in the wedge politics that have dominated Australian public life since the election of the radical neo liberal government of John W. Howard in 1994. The refrain of the queue-jumper is pervasive – from both the government and Labor opposition, talk back radio, letters to the editor. In Australia queues have a decided moral dimension, where 'to jump the queue' is indexical with impoverished moral values and antisocial civil disobedience. To call someone (typically an asylum seeker from the developing world who arrives in Australia by boat) a 'queue- jumper' is a form of vilification. It justifies incarceration in remote desert detention centres and abrogates all duties of care one may have to others (see note 4). We might think then that queues not only represent a technical structure but might also be seen as one of the dominant ethical indexes of contemporary life. Move but keep your place, move but stay in line. We may move more, but this movement is modulated through the technical/architectural ethos of the queue.

Activists in Australia have worked hard to undermine the rhetorical power invoked through the figure of 'queue-jumper' by attempting to educate the 'the public': about Australia's commitments to international law and the 1951 Refugee Convention; by explaining that 85% of all asylum seekers who arrive by boat are, in fact, granted refugee status (often after years of detention); and by stating the fact that in many of the source countries there simply is no queue to join. ^v But in a time in which border (or more generally threshold) control and security coalesce to contain the possibility of any

type of 'flight', such pedagogic and logos driven appeals seems to no avail.^{vi} Pathos doesn't work either, stories of the horrendous suffering of children in Australia's camps, merely serve as further proof of the immorality of the parents who would take their children on such a risky adventure. The refrain remains: someone has 'jumped the queue'- they have committed a seemingly sacrilegious, immoral and unethical act: they have moved 'out of turn'.

At this point a couple of question are begging to be asked. What's so ethical about a queue? And what are the cultural implications of queues as a mode of organization and control?

The queue: a brief history and some obvious observations.

The ethos of an organism is in its grasping together of its elements, on the patience of its environment. Alfred Whitehead

As noted above, the term, queue, derives from the Latin *cauda* meaning tail. Up until the mid 18th century the dominant meaning of the term related to tails or individual appendages that looked like tails, such as plaits and pigtaails. In the mid 18th, according to my Oxford, the term evolved, as the industrializing times might require, to cover a more abstracted idea of a tail – 'a line of people, vehicles etc, awaiting **their turn** to proceed, to be attended to' (my emphasis). The queue concept then both abstracts and concomitantly individualises. The tail ceases being the appendage of an individual human and becomes an emergent form manifesting in gatherings of people – in other words – through crowds. (Co-incidentally the term queue-jumper makes its first appearance in the mid 20th century in England as post war rationing makes queues more vital to everyday life.)^{vii}

But queues are not just visible tails that appear when crowds form around thresholds they are also part of the fundamental architecture of information society. The first work on queuing theory comes from work in telephony by AK Erlang in the early 20th century^{viii}. Queue theory, in this context, is a mathematical theory that models the stochastic processes inherent in waiting lines (probable rates of arrival, number of servers available, rates of service, priority of service, size of system, size of potential customers/queuers, rates of drop out etc). In other words, queueing theory co-evolves with the flows of traffic associated with networks, modeling randomness as probable patterns of movement. Queuing theory is thus about reducing queues, probabilising the potential and possible chaos of traffic.

Queues theorized in early telephony, which dealt with switching circuits (in which telephone operators created a circuit between A to B through the manual insertion of plugs in switchboard) differ quite markedly from those that enable data to traverse the Internet. Telephony works along circuits – a continuous dedicated line between two points. Early attempts to use circuit systems as a mode of opening up lines of communication between computers were found to be inadequate^{ix} As Leonard Klienrock from MIT and UCLA, who along with Paul Baran from the Rand Corporation, is credited with developing packet switching notes:

Computers burst data, they transmit then they stop a while, while they're thinking or processing or whatever. And in those days data communication lines were really expensive," he said. "The idea was, don't dedicate a resource to somebody -- when I was sitting there, scratching my head, that machine was idle, I'm not using it. You want to do it in dynamic fashion: whoever needs it gets it now. If you're not using it, let somebody

else in. (Klienrock in Welch, 2000)^{x)}

Thus processing needed to be distributed and the notion of packet switching (breaking data into finite chunks rather than one synchronous circuit) was developed, based on the idea that a single data communication line could process multiple blocks of data from multiple sources on (originally) a first-in, first-out basis (FIFO). Packet-switching allowed for information to disperse and yet still retain coherence by breaking up data into digital packets and tagging each with a set of identifying labels and instructions so they could be located, directed, identified and reassembled after processing^{xi}. The point here is that packeting and queues enable a resource to be shared efficiently in traffic flows (enabled by routers which identify quickest routes and traffic jams in the systems). I do not pretend to be literate in the intricacies of each of the hierarchical levels of internet architecture^{xii}, but the very nature of multiple store and forward (queue) systems across different services immediately brings to light a political dimension in the technical sequencing and ordering of flows. (For instance TCP/IP is a two-level program that is a base level architecture of the Internet. It attends to flow control and identity (TCP), addressing and forwarding of packets (IP). It works in the main, on a FIFO prescription, whereas as say service providers may store and forward data according to different priorities). As Chris Chesher notes there is a range of quite literal network economies always operating simultaneously. Moreover, with a more intelligent Internet being developed to process greater data loads at higher speeds, networks need to discriminate between which data needs a quick route (such as streaming video) and which doesn't (such as email) –that is to say they will need to operate on a Preferential Service Order (PSO). The politics of such technical judiciousness is in evidence already at the service level, where 'broadband providers mirror the production/consumption paradigm by providing faster download than upload speeds' (another from Chesher pc).

The way in which store and forward systems operate, particularly in the way that data queues configure movement as a series of spatialised events, and where duration is experienced as delay, also points to the productivity of thinking about queues as informationalised rather than just merely ideological or technical apparatuses (although they are these as well). Queues store events, realized through the forwarding processes of packet switching. Data does not 'move down the line', anymore than a person moves down the line of a queue. The queue's form may look like something – a line or a tail – but the queue is a metastable form – stable in its continual variance, complex in its internal and constantly changing dynamics. The processes of 'storing and forwarding' does differ between data and bodies and it may be too much to say that the relationship is analogous, however certain productive insights can be gained by considering these systemic behaviours topologically.

If there is an informational quality to contemporary culture, then it might be not so much because we exchange more information than before, or even because we exchange more information than before, or even because we buy, sell, or copy informational commodities, but because cultural processes are taking on the attributes of information – they are increasingly grasped and conceived in terms of their informational dynamics' (Terranova 2004: 7)

Following Terranova's techno-cultural recuperation of Shannon's work in information theory, in which information is not reduced to 'content' but is rather a statistical measure of uncertainty in a system, one is able to be, in Massumi words, 'abstract enough' to reconsider an informational milieu that encompasses a range of both hard and soft communicative techniques from a perspective that considers the relations of communication and control across both modalising (semiotic system of representation)

and modulating systems (a-semiotic systems, such pragmatic speech acts, invocatory commands, programming and architecture).

Queues are a form of control. They are material abstractions that structure relations between one and the many. They are both 'stateless', inasmuch as that they can form anywhere and that each server request is considered independently (this is certain true technically for TCP/IP, but also 'in principle' true for embodied lines- although queues in both contexts are not without affective residues, the most visible being server burnout and queue-rage). They are also 'state' structures, in the way they produced 'territory', marking out the borders between the orderly queue and unruly and unpredictable mob, and in the way they reproduce across all levels of social interaction – limiting potential into algorithms of probability. Despite the fact that queues seem to be proliferating from food lines at UN facilities to telequeues to call centres in SE Asia and the Indian subcontinent, to talk about queues is in no way to talk about 'the future' in the sense of potentials of technocultural interaction. Rather it is to think of the future as a risk to be managed and controlled. Global connectivity and real time technologies should, if one was naïve to the workings of neo capitalist regimes of power, made queues redundant, yet they persist. In a world of speed, they configure time as space and make delay and stillness a political issue. As Erin Manning notes in a recent paper:

Controlling space is a way of creating a *locus operandi* for a pact of Reason. This is one of the functions of the state. Reason must maintain its borders. Bodies without Organs are not eminently reasonable. For that there is too much leakage. Hence, they must be policed, ordered, categorized, transformed into the national body-politic, into the definition of an imaginary that represents the sublation of identity and territory promised by the myth of the sovereign state." (Manning, 2004 p30)

In other words, queues attempt to make bodies (which can be dividuated and managed) out of the dynamic interconnectivities of Bodies without Organs. Queues reterritorialise motion as such into direction and sequence.

The pilot case study; Interactive Voice Recordings and the rhetoric of telequeue.

There is a very obvious relationship between data queues in online networks and bodies waiting in line from a 'business' perspective, particularly in wealthy capitalist states. The moving of store front service provision, most obviously banking and credit services, to call centres and DIY web services, was in theory supposed to reduce queues and the consequent delay experienced by customers. With this move, the queue became less visible, but many of its dynamics remained and in fact became more obligatory. In this section, I want to briefly examine what some of the social dynamics of these invisible yet still material queues might be, by considering the rhetorics of control that operate in telequeues. Below are transcripts of four interactions with the telequeues of which illuminate some of the distinct methods and rhetorics of telequeues. All the following calls were originated in Sydney.

Please note - I have transparently re-identified the name of Institutions called according to Instructions of UNSW University Ethics Approval Committee. I'll be bringing my IVR recordings with me.

IVR= Interactive Voice Recording

CA = Called Answered (When the call is answered, I have deemed this (perhaps arbitrarily) to be a threshold event- thus one has breached the head of the queue)
QT = Queue terminates when I hang up the phone.

Example 1. CONSERVATIVE NATIONAL Bank.

[IVR-gender F]

[TOTAL CALL DURATION 59s]

IVR1

IVR: Welcome to the CONSERVATIVE NATIONAL Bank, to enquire about our current interest rates, apply for a new loan or to increase your current loan amount, please press 1, to enquire about your current loan please press 2 for changes to your loan arrangements or to open a new account please press 3, for all other enquiries please press 4.

CR: 3

IVR: To ensure our high standards of customer service are maintained, this call may be monitored or recorded for training purposes, you may also be provided with personal advice during this call, please note that while staff are remunerated by salary and may be eligible for annual bonus payments no commissions are received. For information about our dispute resolution and complaints process simply ask our telephone staff.

Dialling: 1s

CA QT.

Observations:

Control rhetoric in service encounters. Choice, obligation and commands.

This IVR displays many of the features found in touch-tone IVRs comprising an initial welcome message, followed by a series of commands and warnings. These are semantically realised through **modulated** 'commands': *please press* and **modalised** statements: *this call may be monitored or recorded for training purposes*. Semantically the concepts of **moralisation** and **modulation** deal with issues of possibility and obligation (or to use traditional rhetorical terms *epistemic* and *deontic*) that operate between positive and negative polarities. 'Yes' and 'No' may entail pragmatic, technological, psychological issues of acceptance and denial but on a semantic level, 'yes' and 'no' are polar - the delimiting points of a spectrum of modalities; maybe, perhaps, should, could, will, won't, must. The space between yes and no is crowded with possibilities and obligations, and in polite discourse one often modalises as a form of rhetorical face facing: offer your interlocutor a way out and muddy the agency of the command into a type of offer of choice. Most IVRS are quite polite, but semantics here are a secondary operation to the illocutionary force of information architecture. Pragmatically choice is limited to series of either/or propositions: Hang up or stay on hold, and press either 1 or 2 or 3 etc.

In the pilot stage of this project, I did a few ethno-methodological experiments and attempted to see how far I get in a queue if I broke the rules. I pressed 9, when the numbers only went to 7; I confided my inner life to voice recognition telequeue systems. All that happened, of course, was I ended up in loops and sometimes with the friendly voice of the IVR expressing increasing impatience with me, both semantically and intonationally.

TM1: Welcome to NATIONAL TELCO

TM2: So I can direct you call to the right place in just a few words please tell me the reason for your call.

RM1: oh you know just lonely, I suppose

TM3; sorry in just a few words say the reason for your call today

RM2: I'm lonely, I need a friend

TM4: I just need you to say one of these: accounts and payments: connections and disconnections, fault or for something else, products and services
HANG UP>

For Elias Canetti every command consists of a momentum and a sting. 'The momentum forces the recipient to act, and to act in accordance with the content of the command; the sting remains behind in him' (305). The rhetorical devices that transmute 'what must be done' into 'what could be done, if you want (our product)' domesticates the command and lessen the sting, or so it may seem.

Example 2. MULTINATIONAL credit card company

[IVR- voice gender: Female (young, perky Australian Accent]
[TOTAL CALL DURATION 3.13s]

IVR:

We're always trying to outdo ourselves here at MULTINATIONAL credit card, Hope you don't mind helping us out by allowing us to record the odd call to coach and develop our team.

DIALLING

Thanks for calling MULTINATIONAL credit card, at the moment we are snowed under but we would love to speak to you, you can either hold and listen to our funky tunes or give us a call back later.

MUSIC 31.1 -53.5 (*How do I live without You?*)

IVR: We hope you're enjoying the music and we're glad you're still with us, we'll be with you really soon.

MUSIC 58.2-1.44.7 (*How do I live without You?*)

IVR: We hope you're enjoying the music and we're glad you're still with us, we'll be with you really soon.

MUSIC: 1.48.6 - 2.35.6 (*How do I live without You?*)

IVR: We hope you're enjoying the music and we're glad you're still with us, we'll be with you really soon.

MUSIC: 2.39 -3.07.2 (*How do I live without You?*)

CA QT.

Observations:

The uses of voice and distracted attention

IVRs are a technical and cultural coupling of locational specifics of voice and dialect and the 'non-place'^{xiii} techniques of the World Wide Web (all these IVRs systems are run through web based applications, such as voice XML). MULTINATIONAL credit company is a recent player to credit services in Australia, although its brand it well known via its other products in entertainment and travel. The brand is youth oriented in its origins and continues to mine and evolve its youth associations in its rhetoric of 'fresh approach', no fuss, no frills, and cutting edge of where it's at^{xiv}.

The IVR appears to break some of the generic rules of IVRs in as much as it folds the semantic redundancies of the welcome message (semantic identification and informational start of IVR system) into a barely discernible request for permission to record. It should be noted that all these 'statements' about being recorded are in fact legal warnings. To continue in the queue functions as a tacit permission to be recorded.

The use of local idiom and accent, plus the use of ‘casualness’ as semantic masking of an underlying regime of obligation (hey its no big deal) all serve to reinforce the brand. What I would like to draw attention to in this exchange is what one might call a disposition of ‘attention’ that operates in IVRs and the repetitive returns that acknowledge the caller ongoing engagement within this system. Often when I talk to people about my queue project, many will discuss what for them is the ‘docility’ of the queue – a presumed ‘time out’ from struggle and interaction as the queuer waits - as though there were no dynamics to a condition of stasis. However as Terranova points out

Information is not about brainwashing as a form of *media effect*, but it does involve a level of *distracted* perception; it thus informs habits and percepts and regulates the speed of a body by plugging it into a field of action. In this sense, the informational dimension of communication is not just about the successful delivery of a coded signal but also about contact and tactility, about architecture and design implying a dynamic modulation of material and social energies. (19) (her emphasis)

Like many other telequeues, the IVR of MULTINATIONAL credit card company deploys a series of what might be called ‘attention’ devices that work to keep the caller plugged in. The easy listening standards of Shania Twain, Celine Dion and the like are neither ‘funky’ nor ‘enjoyable’, but they maintain an audible orientation in an immersive informatic environment. If the music or the product spruiks are playing you are still in the queue. When we are in the telequeue we are in a *Zu Befehl* state – we are ‘like good soldiers ... always in a state of conscious expectation of commands’ (Canetti, 312). For Canetti ‘a soldier is like prisoner who has adapted himself to the walls enclosing him, one who does not mind being a prisoner and fights against his confinement so little that the prison walls actually affect his shape’ (312). This affectual modulation shapes both system and user through a shared architecture of inputs and menus and commands that are so mutually implicative they are no longer generated the outside (a *Ur* principle of commands for Canetti) rather they take on the more intimate relations of prompts. In MULTINATIONAL Credit’s IVR we are not waiting to touch tone 1 or 2, or 3 on the prompt we are waiting to ‘opportunity’ to speak.

Example 3. NATIONAL IMMIGRATION DEPARTMENT

[IVR-gender M]

[TOTAL CALL DURATION 2.25s]

IVR1:

IVR: Welcome to the Department of Immigration, and OTHER THINGS CONSIDERED BEING OUTSIDE THE NATION PROPER. Immigration and Application forms are available from our website. WWW.ACRONYM.GOV For information about all visas, NATIONAL citizenship or NATIONAL passports press one, if you want to report someone to immigration or you are an employer and want help to check work rights press two, to hear the address of our internet website or the immigration office in your state press three, for information about interpreting services, personal information on file and settlement services press four, to speak to an operator press zero, if at anytime you need to return to the previous menu press the star key, to hear these message again , press eight.

CR: [1]

IVR: From the 1st of July there will be an increase in some of the fees associated with visas, a list of our updated fees is available on our website WWW.ACRONYM.GOV or speak to an operator, for information about NATIONAL citizenship or NATIONAL passports press 1, for

information about student visas press 2, if you are an NATIONAL permanent resident and want a resident return visa to travel overseas or want a certificate of evidence of resident status press 3, for information about how to support a visitor to THIS NATION or extend a visitor visa in THIS NATION press 4 for information about family visas that will allow you or someone you sponsor (?) to stay in THIS NATION permanently press 5 for business or work visa information including temporary or permanent visas press 6, for information about how a relative or friend from overseas may apply to enter THIS NATION on refugee or humanitarian grounds press 7 to speak to an operator press zero, to return to the previous menu press star, to hear this information again press 8

CR: [1]

IVR: To become an NATIONAL citizen you need to be a permanent resident, if you are not a permanent resident and want to hear about your options you should return to the previous menu by pressing the star key, for information on NATIONAL citizenship please call 131 880, for information about NATIONAL passports please call the department of foreign affairs and trade on 1300NUMBER to return to the ... press star to hear this information again press 8.

CR QT.

Observations: Transversal architectures

If you want to become a citizen of this wealthy neo capitalist state, the IVR above does not manage a queue so much as loop. The architecture of this IVR very much mirrors the political architectures of its State, from its impenetrability and circularity, (you think you're in queue but find that you are actually in a closed loop), to the highly marked use of a male voice in an IVR (which are dominated by friendly female voices).^{xv} The use of a queue as border structure here is quite marked. The only way to negotiate this queue is quit out and get on another one, which in this instance is another number or another department. This brings us to our final example and one of the quickest queues I experienced in the pilot stage of this project.

Example 4. The Immigration Dob In Line

[IVR-gender M]

[TOTAL CALL DURATION 42s]

IVR1

IVR: Welcome to the immigration dob in line, please hold while you're call is transferred to an operator, your call may be monitored for quality and development purposes, if you do not wish you're call to be monitored, please inform the operator, our client service charter commits us to identify ourselves in our dealings with you for your benefit you may wish to note the operators name or the time and date of your call today.

Ringling: 34.5 -40.5

CA

QT.

Observations

The sting and the queue-jumper

This vigilante line enables members of the 'public' to inform on people they suspect have entered or are working in Australia illegally. It is part of what appears to be an expanding genre of dob-in lines (the Tax Department has a dob-in line, the Federal Police have a

'national security hotline'). The use of the term, dob-in, is extraordinarily marked within the local dialect of Australia (and makes concealment of the identity of this IVR impossible). Dobbing, similar to British English's 'grassing', is a highly pejorative slang term in Australia that is exclusively associated with betrayal. A crucial constituent within many of the myths of 'egalitarian australia', the idea of dobbing is antithetical to the myth of 'mateship'. To be a dobber is, to continue in the vernacular, to be a friendless bum sucker- someone who betrays the matey mob to sup at the rim of authority. For better or for worse this was and is a powerful identity trope for Australians. I mention the strong mythical resonances of the term, not because I want to suggest that Australia is egalitarian and the government's use of the term somehow signals a perversion of 'australian values', rather to draw attention to the Immigration's Department's use of the particular intimacies of slang to draw upon the exclusory power of such myths. Within the very structure of the department one gets a strong sense of who is in and who is out of the myths of mateship and associated prohibitions on 'dobbing'. The Department of Immigration (those seeking ingress) also handles Multicultural and Ethnic (attained ingress from outside of 'english' culture) and Indigenous Affairs (those who paradoxically were always here). If queues reconfigure time as territory (or perhaps more precisely as a spatialised technocultural diagram), this territory operates transversally across many fields of action. The use of the term, dob in, draws attention to who really is 'our mate' in a time of wedge politics. Instead of functioning as reminder that authority is friendless, it serves as the authorising principle for boundary maintenance. And in a world dominated by movement and speed, these boundaries increasingly take the form of queues. For Canetti the sting of a command remains forever with us unless we can pass it on immediately. In a time of rising commands both technically and culturally, the need to pass it on rises too. The queue- jumper, the target of the immigration dob in line, has made the sting of the command palpable to all those who stayed in line and did 'the right thing'. The dob-in line is a literal attempt to incorporate the ethos of national sovereignty (in which we the people are united as one) into the collective but non-unified dividuated ethos of the multitude.^{xvi}

The one and the many; control architecture for multitude

Queues work within paradigms of scarcity, control and risk management. Their very existence invokes a shortage of resources, even if this scarcity is for various reasons, state manufactured. Against the seemingly limitless expansion of capital, queues are control architecture for the many who can no longer be considered a people, but should, following Virno be considered a multitude. A queue, unlike a crowd, unlike the people, does not synthesis the many into a One. Queues are public infrastructures that are experienced privately. They grasp the field of the many and direct them to the sequenced dividuations of the queue. They also make the complex architecture of network structures more manageable both technically and rhetorically. In a recent M/C article, Mark Nunes argues that 'apparatuses of capture modulate flows by eliminating the interstitial and regulating transmission as a mode of order' (Nunes 2005) He uses the example of US military rhetoric to make the point:

As the US military force mounted, one heard less and less talk of the distributed network form of terror, as an uncontrollable threat coalesced in the modulated image of a handful of figureheads: a "line up" in its most literal sense connecting bin Laden, Zakawi, and Hussein... The topology of fear had changed. Within months, the U.S. government's rhetoric had [been redeployed] from [a mapping of] terrorist networks to an "Axis of Evil." Gone were the references to the complex webbing of distributed systems, and in its place, the reassuringly linear, gravitational orientations of good and

evil. (Nunes 2005)

Queues as apparatuses of motion capture work within the same topology. This is the condition of movement – of the dissolution of the ‘people’ to the algorithms of the multitude. We live in non- places – never at home- ‘no longer having at our disposal any ‘special’ or sectorial ethical-communicative codes” (Virno: 37). The queue is a series of spatially arranged events (there are no places only positions) where proximate social relations are negotiated anonymously, and procedurally.

But what of the embodied rhetoric of motion itself? Here again we might to return to Canetti and the work he did on the relations of human postures to power. For instance, how does sitting make one more vulnerable and how does that transmute to the rhetorical power of the king on the throne? Watching TV the other night, I happened upon a Hollywood ‘highschool comedy’ genre of which the undoubted highlight was an exuberant and highly choreographed cheerleading routine. Full of high twisting throws, syncopated movement and towers of bodies vaulting effortless skyward, I was exhilarated, my heart beat faster, I was hyped. The speed, verticality and cross vaulting movement of the cheer routine struck me as operating at quite the other end of the controlled movement polarity to the horizontality and stillness of the queues I have been watching at town hall station. Here the queue shuffles in slow bursts; it redirects one to all but the immediate cohesion of the queue. Here is a distributed and rhetoric in motion, where the autonomy of stance (to be able to stand is to both self supporting and ready to go) is overridden by the complex ethos of the multitude – where there is never an exit only another queue.

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ⁱ De Landa 2002, Intensive Science and virtual philosophy

ⁱⁱ cf Melinda Cooper's work on the immortal hydra and limitless systems. In Greek mythology a hydra is a monster with many heads that grew as fast as they cut off.

ⁱⁱⁱ It is significant that the first chapter of Elias Canetti's 'Crowds and power' deals with 'the fear of being touched'.

^{iv} Just a few notes as back story to those unfamiliar with Australia's recent history in dealing with refugees and its policy of mandatory detention for all asylum seekers including children cf.

www.chilout.org.au (for an activist perspective) for academic commentary cf.

www.borderlandsejournal.com. John Howard is often labeled ironically as 'Honest John'. These quotes reveal Howard in full honest John mode: Australia has not only turned away unseaworthy boats (being implicated in the death of 353 asylum seekers in the Bunda Strait, (known as the SEIVX event see <http://sievx.com/>) refused to comply to international laws of the seas by refusing to allow the 'Tampa' to unload rescued refugees at the nearest port, which was in Australian territory. In fact Australia excised many of its outlying islands from its migration zones, so that 'boat people' could not apply for asylum in Australia, even if they were standing on Australian territory. On a per capita basis Australia, one of the wealthiest countries in the world takes less refugees than Jordan, Pakistan etc.. It has certainly deported unsuccessful refugee applicants to certain death (cf. link to Hazara story). Moreover, such is the zeal of the Department of Immigration to weed out illegals and queue-jumpers, that it has also been recently revealed that the Immigration Dept has been not only incarcerating mentally ill Australian citizens of non-anglo celtic ethnic origins in its remote desert detention centres, but has also been deporting them. An Australian woman (of Filipino descent) was deported to the Philippines 4 years ago, after she received a broken back in a car accident. She was deported in a wheelchair. She has only just been 'found'. Her two children still in Australia now needing to come to terms with a mother who was institutionally disappeared.

<http://www.theage.com.au/news/Editorial/The-regrettable-case-of-Vivian-Alvarez-Solon/2005/05/13/1115843369186.html>

One final note. One notes in Howard's rhetoric a natural complicity with the Zionist project of colonizing refugee rhetorical tropes (the victim, the camp, the suitcase), so they can apply to no-one outside of the Holocaust experience.

^v On one particularly well-known site <http://www.boat-people.org/>- the queue jumper is both the first and last myth about asylum seekers that they attack:

MYTH 1 - Boat People are Queue Jumpers

Fact: In Iraq and Afghanistan, there are no queues for people to jump.

Australia has no diplomatic representation in these countries and supports the International coalition of nations who continue to oppose these regimes and support sanctions against them. Therefore, there is no standard refugee process where people wait in line to have their applications considered.

Few countries between the Middle East and Australia are signatories to the 1951 Refugee Convention, and as such asylum seekers are forced to continue to travel to another country to find protection.

People who are afraid for their lives are fleeing from the world's most brutal regimes including the Taliban in Afghanistan and Sadaam Hussein's dictatorship in Iraq.

^{vi} A radical development in this area is an integrated people-counting and security system that operates in real time by retail service company Beonic. The system strategically places sensors in stores to predict service events based on patterns of customer movement and clustering within a store. Thus the system can flexibly allocate server resources in a real time situation.
http://www.beonic.com/media_march212004.html

^{vii} As my friend Helen Duckworth said when I was talking to her about this: does that mean queues are the arse end of humanity? Who said slang isn't poetic and deep?

^{viii} Erlang Erlang, A. (1911), "The theory of probability and telephone conversations", *Nyt Tidsskrift Mat.* B,20, 33–39.

^{ix} Cf . in 1965 Thomas Merrill and Lawrence Roberts connected the TX-2 computer in Massachusetts (sp) to the Q-32 in California with a low speed dial-up telephone line creating the [first \(however small\) wide-area computer network ever built](#). The result of this experiment was the realization that the time-shared computers could work well together, running programs and retrieving data as necessary on the remote machine, but that the circuit switched telephone system was totally inadequate for the job. (cf Internet Society 'official history', Cerf, Postal Klienrock etc)

^x UCLA was chosen to receive the first "node" of the network in 1969 which was a connection between a refrigerator-sized "Interface Message Processor" and a smaller department computer. In the presence of such doubters as AT&T executives (with whom Kleinrock had been clashing for years about the phone monopoly's contempt for data communications), the packet-switching concept was demonstrably proven on Sept. 2, 1969. The network soon spread to Stanford Research Institute, UC Santa Barbara and the University of Utah, then to seven more universities by the following summer.

^{xi} 'Up until that time there was only one general method for federating networks. This was the traditional circuit switching method where networks would interconnect at the circuit level, passing individual bits on a synchronous basis along a portion of an end-to-end circuit between a pair of end locations' (*Klienrock et al.*)

^{xii} I am grateful to Chris Chesher who knows a lot more than me on digital network architectures for his input into this section of the project –his patient explanations of various network topologies and his many insights into the politics of technical developments of the web, particularly www2. Chris and I intend to develop and publish our discussions in this area.

^{xiii} Cf Marc Auge, non- places.

^{xiv} I note that I was unable to acquire a card from this company because of the slow turnaround times – 4 weeks minimum – and its inability to accept digital material from my employer.

^{xv} **Myth 11: Refugees should stay in the first country they come to and 'join the queue' Fact: Australia has not taken a single refugee from the UNHCR in Jakarta – from the so-called 'queue' - for more than three years. This is despite the rhetoric from Australian politicians for asylum seekers to be processed in Indonesia. It should also be noted that UNHCR centre in Indonesia was set up by Australia with Indonesian support. Refugees cannot stay in Indonesia because Indonesia is not a signatory to the Refugee Convention.** There is no requirement in international law for refugees to seek asylum in the first country they come to. Some developed countries have made this an additional requirement in order to avoid processing claims, leaving the large numbers of asylum seekers in camps in Third World countries. International law requires that asylum seekers should not be penalised according to the way in which they enter a country. Australia's current policy does not accord with this requirement. Some people have given up on the 'queue' and resorted to coming by boat. 24 of those who recently died when their ship sank off the coast of Indonesia had already been granted refugee status by the UNHCR in Jakarta. Many more had relations in Australia who had been provided with asylum but were not allowed access to their wives and children. Simply, the 'queue' does not work. (from boatpeople.org)

^{xvi} How successful this strategy has been remains to be seen. Hopefully by the time I present this paper I will have received dob-in line call stats from the department.