GAMIFICATION AS CARTOGRAPHIC PRACTICE

Reflections on Panamania! the board game

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With our research into Panama's border conditions and migration flows we have taken what could be described as a 'counterfactual' and ecological approach. Borders are not reduced to line thicknesses on a page but consist of multiple and various events and landscapes that serve to slow or impede the movement of matter and energy. Migration is not seen to represent exclusively the migrant as a person, but rather embodies a broader scope of the movement of various things besides the human: copper, eagles, and cocaine are some examples. The map takes on a distorted cartography which emphasises Panama, while at the same time positioning it firmly in a global context as a result of its canal. In order to generate an interactive and experiential mode of reading the map, we have gamified these migratory flows and borders, such that the reader takes on the narrative of the migrant, conquistador, or Chiquita banana which they play as. This allows for the introduction of absurd (fictive) scenarios, new potentials, and interactions between characters that underscores their interdependence and shared experiences.

Map: The activation of the game board.

Character: Agents of migration represented within the game.

Player: The audience interacting with the map.

1. Escobar, Arturo.
2018. Designs for the
Pluriverse:Radical
Interdependence,
Autonomy, and the
Making of Worlds.
Durham: Duke University

Migration signifies the controlled and perpetual movement of bodies across geographies. Within our map, this phenomenon is embodied through a diverse cast of characters: the migrant, indigenous, conquistador, tourist, eagle, banana, copper, and cocaine. Each is mobilised to spotlight the political decisions, economic opportunities and environmental factors that impact their existence. These characters navigate the borders of Panama that are not just geographical and territorial boundaries, but events that hinder or facilitate their movement. As such we see the border as a function of time. Our exploration transcends conventional representation by delving into the evolving nature of these border regimes across multiple timelines. By doing so, we uncover the interconnectedness of narratives of these characters echoing Arturo Escobar's theory on the pluriverse¹. Within shared borders, their worlds collide, clash and entwine, challenging the notion of a singular truth or experience.

By doing this, our mapping enables us to present a more holistic view on data sets which are otherwise often presented as separate entities: statistical data, versus first hand accounts, versus photographic or video essays, versus census data collected by the IOM. There lies a difficulty in trying to bring these various data sets together (besides their difference in kind): statistics regarding the extraction of Copper are not immediately of consequence to the first hand account of someone crossing the Darien Gap; nor are historical accounts of the Colonial Spanish of any apparent (immediate) relevance to the number of tourists that visit Panama City each year. However all of these events occur within the same territory, they cross paths, and meet each other at various moments in time.

Bringing this data together opens up to a highly speculative model - the complexity of what is happening within a territory at any point in time is practically incomprehensible. And with the meagre tools that journalism seems to offer - like the statistic, there exists the possibility for things to happen otherwise. In other words, there is a coefficient of unpredictability built into any event. Finally, since these spaces of migration and regulation are in a state of perpetual change, the data that represents them is also in constant flux. The complexity of these border conditions and the events that take place are made all the more intangible by the means of representation: numbers of tonnes of cocaine for example (who really knows what a tonne is... or feels like? Let alone what 600 million euros² are) - there is a problem of subjective reading with regards to this information, and its ability to 'play out' differently, in different locations and at different times.

In response to these issues of subjective reading, the slippage of data and contingent realities, the complexity presented by these border regimes and the events which take place along them, we have chosen to leverage the distortion inherent in mapping to create an experiential form of reading.

Through the act of mapping, a complex and inexhaustible set of experiences and information such as the coastline or a street is reduced to a line of a half millimetre thickness; or an entire village with thousands of people can be reduced to a point on a page. In the real world, a set of data is selected and then provided with coordinates that plot their relation accordingly on the abstract 2D space of the map. That person or persons which choose which data is presented, how those relations work, what the system of plotting is, and where on a page it is printed, is in total dominion of their abstract world. This is the case for all maps. We have distorted the world map to fit the needs serving to the tangibility of the data which we are presenting. This distortion occurs at two levels: the spatial, and the temporal.

Geographically, the emphasis of our mapping calls for an enlarged Isthmus, however also for its relationship to the rest of the world. Ultimately this has created a world map in which the continents of Eurasia, Africa, and the Americas are reduced in size, and are spatially organised according to their relationship with the Panama Canal instead of their relationship to each other (Fig. 1). This spatial distortion allows us to focus our attention on the border events which take place throughout a migratory journey across a particular territory, while at the same time maintaining a sense of the periphery beyond the territory of Panama itself.

Any map is not only a distorted representation of spatial features, but also of time (maps don't happen at the same time as the reality they depict, each information point has a different time reference, whether that be recent or distant). By virtue of including various 'characters' and pathways across the map - time is presented as a multiplicity, rather than a chronology. The map exists for both the 17th century as it does for the 21st, and movements across the map are contemporaneous. The temporal factor in most maps is cumulative - the spatial consequences of all time are represented at once to the viewer, and the time at which the viewer experiences these features is not often taken into consideration. In our depiction we exaggerate this temporal distortion by including names of bygone centuries, characters of another era, and placing them directly on top of each other, rather than the most recently cumulative feature, name, etc. Secondly, our distortion of time is in the experience of the map's reader, who in fact must sequentially experience the information, which is in turn constantly interrupted by the events of others - happening in their own spatio-temporal frameworks. We have disrupted the fluid passage of time in real experience as an index of singular events for each character. By doing so, we hope to bring forward the complexity of the events that take place in migratory processes, and also offer the ability to engage subjectively with the otherwise abstract and removed information of the map.

^{2.} Sterling, Toby. 2023.

"Record 8,000 kg
of cocaine seized
in Rotterdam port
-prosecutors" Reuters,
August 10, 2023. https://
www.reuters.com/
world/europe/record8000-kg-cocaineseized-rotterdam-portprosecutors-2023-08-10/

The methods used to create our map serve to satirically investigate and critique common distortions, griddings, and temporalities upheld by typical mappings. This is done by means of an alternative, and radical set of distortions which are then overlaid by a highly regular and arbitrary grid. The satire of our mapping exists as a result of our distortions, and points to the absurdity of the act of mapping as an exclusively descriptive tool.

Satire also manifests itself in the forms of a larger, geopolitical commentary by virtue of our gamification of the data collected. Gamification within cartographies acts here as a form of incorporating strategic elements into the act of reading the map. Due to a person's individual experiences, they will necessarily read any map in their own way compared to other readers. As such, by positioning the reader in the position of a 'player' who needs to act and make decisions in their reading, we are exaggerating their role as the reader, and amplifying the different experiences that are possible within any reading of the map. Making use of game theory, we have provided the reader with an added goal, along with the means to reach it, however, in light competition with the context of the map, as well as other actors who have the ability to influence the player's ability to reach their goal.³

By gamifying the territory of Panama, the readers of the map, or, 'players' are able to personify the characters that build their own path informed by geographic conditions, statistical events and interactions with other actors of the board. The cartography invites readers to effectively become actors in the territory and take a part in a system of events (Fig. 2). The irony of course is that while doing so - the player is somehow transformed into the character in the board, while at the same time exists perfectly removed from the real situation which the map aims to describe. This results in a kind of humour, which is often disturbing - as the events happening to the character become assigned to the person playing the game.

By doing so within the context of Migration and Borders in Panama, we are able to create a strategic situation out of particular actors that have a relevance to the context and each other. As such the characters that we have chosen are representative not only of a particular individual, but also of larger geo-political tensions, such as Chinese/USA interest in the Panama Canal, the constant pour of migrants moving north from South America attempting to reach the US, as well as the consumer capitalist society of the west that depends on resources and production from countries in the East.

The irony of this disjunction between player and character, is that while the player suffers consequences (good and bad) in game, the consequences are relatively homogenous, either moving forward, or backwards, or waiting (Fig. 5). Characters of the game are optimised into homogenous movements of crossing gridified tiles across the board. The infrastructure of the game unfolds multiple complex systems that each character contains into a reorganised coordinated engaging manner. This is a fairly blatant reduction of the heterogenous range of consequences that could happen in reality. In extension of this, we also realise that while movement is an inherently heterogenous activity, the method of progressing through the board is reduced to a simple and consistent dice roll at all times. Different characters in reality move with different degrees of ease, depending on their capital, ability to fly, or as an object, they are dependent on others - in our game though, flattening this hierarchy allows for the player to experience their position in the game as one which has relative influence on the other actors, and encourages action. Here we recognise also, that every move in the game is tied to a probability of a dice roll - and, where you land dictates what consequence the character must face - effectively attaching a 16.6% chance of landing on any particular consequence. In reality, there is no '16.6%' chance of teleporting from one location to the next or avoiding or encountering death - it either happens or it does not, and it always happens in time, not as instances but as a continuous unfolding of events. However, due to different geographical routes, and different character abilities, different character's routes highlight the contrast of accessibility, risks and danger that each of the characters experience throughout the game. When combined, gamification and systemisation create an alliance between characters and their routes, encouraging magnified discussions, intensified imaginative scenarios and possible irrational endings.

^{3.} Ross, Don. "Game Theory". The Stanford Encyclopedia of Philosophy (Fall 2023 Edition). Edward N. Zalta & Uri Nodelman (eds.). https://plato.stanford. edu/archives/fall2023/ entries/game-theory/

Taking cues from other game board structures, other features are integrated into our map. These include the Panama papers, a riff on the scandal of 2016 in which millions of documents were leaked, linking some of the world's wealthiest and most powerful to offshore tax evasion, much of which passed through Panama. In this instance, the panama papers have become on the one hand a reference to the reality of mass tax evasion and fraud at the global scale, while in the game, they function as events or situations which require action from the various characters – underpinning their inherent difference economically, socially, and geographically (Fig. 3). By engaging with the differences between player, strategy, and character, board, map, and actual national territory, we are making the intangible set of data a sequence of experiences. These are then told as the players play, or read the map, and as a consequence of a start and finish line, and particular character definitions, we come to an understanding of narrative.

Marrative crafting is an age-old human tradition in which knowledge is distorted, moulded, and repeated. It is one of our most influential tools in which information can be encoded and imparted in ways that interweave familiarity and foreignness and encapsulate the often-imperceivable scales of time and space. Our mapping exists as a narrative in its own right, in which a collection of paths of migratory movement are interrelated, compared and rewritten using visual and literary devices. This was catalysed by the format of knowledge we collected. That being, the linear experiences of diverse characters as they navigate the territorial conditions of Panama; stories that are simultaneously shocking and mundane. Presented together, it becomes a saga of territorial negotiations, inheriting the pedagogical qualities of storytelling and gamification in its player interactions.

Like our map making forebears, our selective distortions, character choices, and statistical representations form a distinct narrative of migration in Panama as we perceive it. However, while we crafted what we can call the 'world of Panamania' the interaction players have with this multiplicity of events is experienced at random. This effectively mirrors the reality rather than the mathematics, as distinct and unique individual narratives form from a world organised by statistical probability. These generated player narratives are further informed by the gamification, in which we distort exactness, rather than defacing it. For example, by stretching the timescale of character movements, and grafting distinct yet related stories. This allows for moments in which a player, in their navigation of the board participates in parallelism. The game creates a thin line between the player and the character, which deconstructs the barrier between the statistics and real events and embraces engagement and intelligibility. This method of experiencing the map, rather than observing, assists the players construction of meaning and knowledge. Further, it allows complex statistical data to manifest as relationships between players and the game as well as between the players themselves, by directly relating them to the real experience of migration. It is within this imparting of real knowledge through player-catalysed stories that the complex reality can be understood.

Consequently, the gameboard exists as the record of migration and the gameplay becomes a generator of new narratives, forming what Werner Hertzog would describe as ecstatic truths. These build emotive and confronting bonds between the player and the character. Consequently, shedding the sharpness of statistic-based narratives and re-personifying what are deeply anthropologically intersecting stories. In doing so it becomes possible to compare, subjectively yet relevantly, the incomparable in a way that often becomes satirical in its extreme juxtapositions. Accordingly, the explicit use of visual storytelling and literary devices in our methodology has allowed us to both encapsulate, and project, the interrelated and omni-spatial nature of migration, and the navigation of dissimilar borders and territorial conditions.

5. Hertzog, Werner. 2010. On the Absolute, the Sublime, and Ecstatic Truth. Boston University.

^{4.} ICIJ. 2017. "Explore the Panama Papers Key Figures". International Consortium of Investigative Journalists, January 31, 2017. https://www.icij.org/investigations/panama-papers/explore-panama-papers-key-figures/

n its completion Panamania! has leveraged highly transformative techniques that in their distortions and player interactions present an encapsulating, complex and poignant understanding of migration in Panama. As we have expanded our interpretation of migration to include a range of both human and non-human actors, we have been able to reflect the simultaneity of migratory paths and territorial negotiations. Further, with our distortion of space and time these migratory agents, or characters, are aligned as cohabitants of reality, in which diverse temporal journeys are shown to exist in relation and interaction of one another rather than in a contextual void. In conjunction, we have also provided a critique on traditional cartographic practice, in which objectivity is aspired for yet never achieved due to the innate spatial and temporal bias's present in representation. These methods form the basis of our map, but it is with the gamification of the presented data that Panamania! becomes particularly relevant and effective. The audience becomes a player, and in turn exist in parallel to the characters of migration. As they engage with the map the player catalyses a unique potential narrative, which intrinsically links them to both the statistic and the character that statistic represents. Consequently, the map manifests as an expression of what exists as a statistical collective as well as the potential realities of the individual, in way that coaxes emotive entanglements with the player (audience). In turn Panamania! the board game is an effective example of how gamification in cartographic practice can produce relatable, intelligible, and representative maps that in this case negotiate the complex multiplicities of migration and territorial negotiations in Panama.

> AR3BO100 Borders & Territories Graduation Studio

> > AR3A010 Research Plan

Tutors: Stefano Milani Oscar Rommens Negar Sanaan Bensi Marc Schoonderbeek



Fig. 1

Gameboard or base map.

For a higher quality version proceed to: https://drive.google.com/file/d/15992Gr0g3Vjq_Kj9uQsgn607NYg4W9ti/view?usp=drive_link

For references proceed to: https://docs.google.com/document/d/1-U9cgIA8Hvils_ldohtCL2
BpxZIM61YeUycjG0FwfM/edit?usp=sharing



Fig. 2

Panamania Play through.

To watch proceed to https://drive.google.com/file/d/1pqQdjvNKZxSeYPNVD_u8yEntGa5-Brtk/view?usp=drive_link









Fig. 3

Panama Paper Cards.





















Fig. 4

Character story & attribute cards.

PANAMANIA! CLASSIC

Panamania is a board game which maps out the various borders and migrations across the Panamanian territory.

Borders are not taken to be simply physical obstacles, but consist of multiple and various events and land-scapes that serve to slow or impede the movement of various bodies.

Migration is therefore not seen to Migration is therefore not seen to represent exclusively the migrant as a person, but rather encompasses a broader scope of the movement of various products, objects, animals, and people relevant to the territory being depicted.

PREPERATION is next to none! Gather friends and family, get a de-licious beverage and settle in for a night of laughter and tears together.

Simply remove the board pieces from the box and arrange them according to the fold out map on the next page.

Shuffle the Panama Papers, and place them on the designated zone marked by a '!' on the board.

Each player must select a character from the character cards and then place their corresponding (colour co-ordinated) pawn on their respective START tile and the fun and despair may begin!

THE MAP takes on a distorted cartography which emphasies Panama, while at the same time positioning it firmly in a global context as a result of its canal. In order to generate an interactive and experiential mode of reading the map, we have gamified these migratory flows and borders, such that the reader takes on the narrative of the migrant, conquistador of the introduction of absurd flictive, scenarios, new potentials, and interactions between chartography and the second of the control of the

acters that underscores their inter-dependence and shared experiences.

Remember that while you're sipping on your beer having a good laugh that your friend Patrick is being section good laugh that your friend Patrick is being sexually assaulted in the Darien gop in-game, that is happening every day to real people, in a way that's not so funny. The entire boardgame allows for fictive and speculative readings, however is based on fact and research, not fiction.

CHARACTERS are the personifi-cations of migrating bodies in the Panamanian context, and allow for the player to engage personally with the real circumstances of the border

The characters selected for this game are chosen so as to encapsulate the broadest possible range of migratory entities relevant to the context.

There are 8 distinct characters, in-dicated by their respective charac-

ter cards. These character cards will explain each character's origin story, goal, and their unique abilities which are activated in certain situations outlined later. As such your choice of character will greatly influence your gameplay experience and dynamic within the setting of the game - Choose wisely!











Each turn, the player will roll a D6 and advance that many tiles forward. If the player encounters a coloured path, road, or air flow leading from a tile, they may follow this line until reaching the next following tile and continuing their count as normal.

Fig. 5

Panamania! instruction booklet.

TILES are the locations in which characters find themselves, and are the main mechanic in the game which introduces information, and demands action from the player. The tiles can be divided into coloured tiles, which are character specific, corresponding to the character's colour; and grey tiles, which are communal, and can be used by any of the characters that have access to them. The lines that connect tiles are always character specific, according to colour.

To map out the various events and situations that act as borders, these tiles can be further subdivided into 8 types. There are 80 tiles per route.

START and FINISH tiles represent the beginning and the 'end' of each character's migration with regards to Panama. Characters must begin on the Start tile, and reach the Finish.



DEATH tiles signify
the end of a charsector's path. There
are 2 Death tiles
per route, and they
manifest themselves
in different ways. Effectively, the definition of Death here is that the character is no longer 'migrating' and is
therefore 'out of the game.

STATISTIC tiles re

STATISTIC tiles require the player to roll a 20-sided dice (D20) to determine which action they should take. Consequences on the board consists of waiting (skipping the specified amount of turns), going backwards, or advancing forwards by a certain number of tiles.

GOOD NEWS and BAD NEWS tiles indicate a conse-quence that is either good, or bad. The



%

consequence stated by the tile must be carried out by the player. Good news is represented by a circle, and bad, by a square. This was an arbitrary choice.



The panama papers carry the same '!' icon on their back. The player must read the panama paper out loud to the other players. These special cards are able to create changes across the board - representing global, national, and ecological events that can have consequence for every character in Panama. The characters influenced by the panama paper must carry out. the panama paper must carry out consequence as described.



BLANK tiles are the final tile type, and in the classic virsion of the game, allow each character to make use of their specific attribute. These blank tiles, in combination with character attributes allow for interpersonal intercion detached from the game board, board games are after-all, a social practice.

LOSE states in the game do not exactly exist. So, 'everybody's a winner!' but perhaps given the character and the nature of their journeys, perhaps 'everybody is a loser...'

It should be clear that as characters you have little in common - your challenges are different, and even your modes of transport. As such, it is of little consequence if the Cocaine is sorted in Berghain before the Conquistador is able to return to Spain with the gold of E Dorado. The opponents in truth are these gosh-darn border conditions?









The game is **COMPLETED** when you as the player have completed your route in some way or another - by reaching the finish tile, landing on a death tile, or otherwise, simply by

PANAMANIA! **VARIATIONS**

BLANK tiles are the only tile without a prescribed function, and as such allow the game to be played again and again, with different consequences and opportunities every time characters land on the blank.

What follows is a sequence of game variations, with a different rule for the Blank tile. In these variations, the 'Character attribute' can be ignored, and the game space becomes much

more competitive, since you start with the same resources and abilities.

It goes without saying of course, that you are very welcome to define your own variations, inventing your own rules for the blank!
Best of luck out there, it's downright Panamania.

WICKED GAME. In this game varia-tion, blank tiles grant the player that lands on them a number of moves corresponding to the number of ac-tive characters on the board.

If 8 people are playing, the player receives 8 free moves. These moves can then in turn be distributed as the player sees fit to other characters.

Furthermore, the player can determine in which direction each character must move: forward or backwards

Finally: consequences of the tiles landed on apply, except for other blank tiles. HARD MODE In this game variation, blank tiles simply represent the near-est possible 'BAD NEWS' tile to the

ation, blank tiles encourage teamwork and being kind - especially great for teaching generosity to greedy little shits. A HELPING HAND In this game vari-

Every time a player lands on a blank tile, they must advance one other player by 1 tile. Consequences do not apply.

THE GOOD OLD DAYS In this game variation, all 8 players must play as ei-ther a conquistador, or an indigenous character.

In this game set up, Panamania 'classic' game rules apply for the character attributes.

With four on each team, they must try to reach their goal with as many sur-viving characters as possible as fast as possible. The first team to complete the course wins.

AINAMANAP In this game variation, characters must begin at the FIN-ISH tile, and move backwards to the START tile.

REAL LIFE MODE In this game variation, in-game consequences must be carried out in reality to the players, not only to the in-game characters.

We do not recommend this game mode, and if you are playing it BAM holds no responsibility for any PTSD, Death, starvation, Emotional trauma, or any other potential consequences.

PLAY AT OWN RISK.



Auxiliary elements including dice and character pawns.



1-8 Players

Designed by BAM in South Holand (yes, none of the designers are Panamanian and no, we have not been to Panama)

Ages 0 to 99+ (never to early, or late, to be exposed to the complex often incomprehensible scale of the ontic. Contains themes of sexual assault and drug abuse - housever this seems not to be a problem for the children encountering it in real life.)

 $\hbox{CHOKING HAZARD-bite sized statistics, that explore expansive \it migratory}$

