

Notes from Hades

The past month has been relatively quiet for me. The only traveling we did was a family trip to West Virginia to visit relatives. (I talk more about this trip in response to Bob Robles letter below.) The other big event of the month was the installation of our solar photo voltaic system. It is a 3000 Watt system that on a sunny day has been generating as much as 20 kWh over the course of a day. It's nice to finally have it in place. I should be able to eliminate a good portion of my electric bill with it, particularly if it is cool enough to not have to run the air conditioner.

The next deadline is **Tuesday, September 12 at 5:00**

p.m. Pacific Time. Please do not call or fax orders after 10:00

p.m. Pacific time. My wife and I tend to retire early. Also, if you want to fax in orders, call first. We hang up on unannounced faxes.

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Game Openings

Terrier. Silverton. We will play the advanced game with the Hiring and Advancement optional rule. Have Dave Partridge, Bill Scharf, Andy Lewis, Paul Bolduc, and Michael Longdin, will take up to 1 more.

Hound. Outpost. Dave Partridge, Bill Scharf, Kevin Wilson, Andy Lewis, Michael Lowrey, Andy York, Eric Brosius, and Michael Longdin, will take up to 2 more.

Flea Collar. Kremlin. This game will start when Sled Dog ends. Have Bob Robles, Brendan Whyte, Pasquale Giovine, Chris Geggus, and Mike Scott need 1 more.

Dog Park. Machiavelli. Rules determined by player vote as usual. Have Kevin Wilson, Dave Partridge, Bob Robles, Pasquale Giovine, Mike Scott, and Dale Horsely, will take up to 2 more.

Bulldog. Seafarers of Catan. We will be playing the Oceans scenario. Have Mike Scott, Dave Partridge, Michael Longdin, and Andy York, need up to 2 more.

Wish List

Dune. We will use the optional Lansraad, Ixians, and Bene Tleilaxu powers. Have Kevin Wilson, Bob Robles, and Paul Bolduc, will take up to 3 more (4 if one player plays the Bene Tleilaxu).

History of the World. Have Andy Lewis and Kevin Wilson, will take up to 5 more.

Age of Renaissance. This game will start when Dog Chow finishes and will use the European rules and alternate map. Have Michael Longdin and Bob Robles, need up to 4 more.

In general, game ownership is recommended, but not required.

Note that a subscription to S.O.B. is not required to play in a game run by flier, but that a game fee will be charged to non-subbers.

S.O.B. is a zine of unusual postal games, and anything else I feel like including. Your publisher is:

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Subscriptions cost \$2.00 per issue (\$3.00 overseas).

Howling at the Moon The S.O.B. Letter Column

Bob Robles

How is the summer for your family? We have children coming and going: camp, work, out with friends....Just acquired a new game (rare event indeed), 'Here I stand' Do any of your readers have experience/opinions of the game they wish to share? One book: Pattern Recognition by William Gibson. Mr Gibson is probably better known as the "father of the cyberpunk genre". In his previous novels he has constructed quite the dystopian future for us; one chock full of cool technology, violence, and thought provoking commentary on human nature. This novel is set in the present, but deals with similar themes of technology and the human condition. This is a very different novel for those looking for a novel building on William Gibson's prior works. There is only a single character and plot line, much internal dialogue, and a very slow build up to the novel's finish.

His observations are as keen as ever, but I thought there was not much in terms of suspense or even emotional attachment to the main character to keep me hooked. If you really like William Gibson I think you will like his observations of the present. If you have never read him and really want to get your socks knocked off, start at the beginning with 'Neuromancer'.

[The summer is treating us fairly well. We went to visit Celeste's aunt and uncle in West Virginia in late June. The boys enjoyed the trip, especially the trip to the new annex of the Smithsonian Air and Space Museum near Dulles. It's essentially a huge hangar with many planes in it including an SR-71 Blackbird, the Enola Gay, a Concorde, and the original space shuttle prototype Enterprise. The boys are still talking about it.]

Off the Leash

Advanced Game, Plague, Famine, Special Military Units, Conquest, Moneylenders, Gray Press, Ultimate Victory, Gunboat
Miller Number 2001Fpw10
Summer 1468

Deadline for Fall 1468: 9/12 Tuesday

Venice accepts minor losses to France in the north to make bigger gains against Naples in the south.

Spring 1468 Retreats

Naples A Bologna retreats to Urbino

Expenditures

France gives 1 ducat to Naples.

Outstanding Debt

Summer 1469: 27 ducats due from Venice (18 borrowed)

Fall 1469: 3 ducats due from Venice (2 borrowed)

Orders

FRANCE 🏳️: A SWISS to Tyrolea, A TRYOLEA to Milan, A Como supports A Tyrolea to Milan, A MILAN to Bergamo, A PAVIA supports A Tryolea to Milan, A Cremona to MANTUA, A Modena to LUCCA, A Genoa to MODENA, F GULF OF LIONS supports Naples F Gulf of Naples to Tyrrhenian Sea (nso), F LIGURIAN SEA supports A Modena to Lucca

NAPLES 🏳️: A Urbino to SPOLETO, A Florence to URBINO, A PISTOIA supports French A Modena to Lucca, F Gulf of Naples to NAPLES, F MESSINA supports F Ionian Sea to Otranto, F Ionian Sea to OTRANTO, F PALERMO supports French F Ligurian Sea to Tyrrhenian Sea (nso)

VENICE 🏳️: A AUSTRIA supports A Carinthia, A CARINTHIA supports A Austria, A Hungary to SLAVONIA, A TRENT supports A Verona to Bergamo, A Verona to BERGAMO, A PERUGIA holds (u), A Ferrara to BOLOGNA, A (EM) Bologna to FLORENCE, A Carniola to ANCONA, A Albania to AQUILA, A Aquila to SALERNO, F WESTERN MEDITERRANEAN to Gulf of Lions, F TUNIS to Western Mediterranean, F CENTRAL MEDITERRANEAN supports F Durazzo to Ionian Sea, F Durazzo to IONIAN SEA, F LOWER ADRIATIC transports A Albania to Aquila, F UPPER ADRIATIC transports A Carniola to Ancona, G LUCCA convert to A

Your treasury:

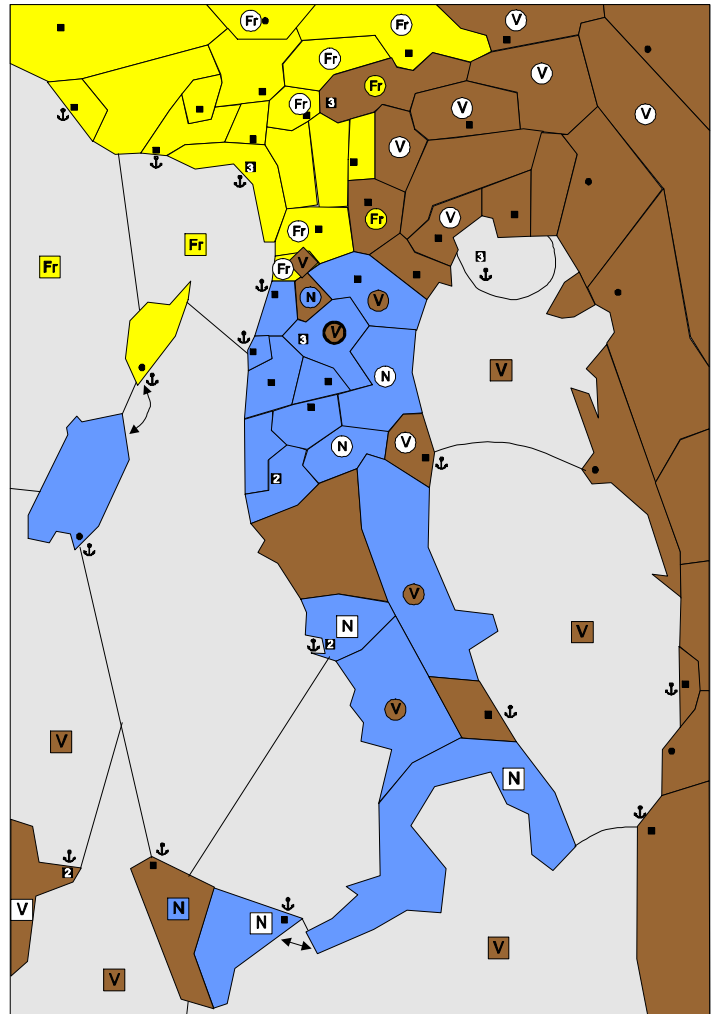
Press

France – Naples: Your prophecy about plague in Mantua was right, but we also were hurt heavily. I gave one ducat to you in order to disband a Venice unit in fall and avoid his taken of one your city. About my fleets, you did not give any suggestion and I moved as I thought better, I hope. Please let you suggest something for fall at least If I shall be in Modena and Mantua, I shall support your Florence to Bologna.

Naples – France: I hope now that you see better my builds. My 4 fleets in the south need to hold off his 5 till you can take WM, and I hope you moved from LS to TS this turn. In the north I am also overwhelmed, till you can put more pressure on him.

Naples – Venice: What, nothing to say last turn..... or is that you gasping for breath? Not that our immediate strikes should hurt, but maybe in a turn or two, huh?

Off the Leash



○ Army □ Fleet ◇ Garrison ◆ Autonomous Garrison ◇ Besieged Garrison

Venice – Naples: You have to admit, this is a lot of fun trying to figure out what each other will do. Our front has holes everywhere which makes for a wild and woolly chess game. My front with France is kind of dull.

Venice – Both: I had expected more bang for your buck after spending 36 ducats on me between you two. It seems your gains are limited to Milan and pushing me back around BOL. Your southern front still resembles a sieve though.

Venice – Pope: Thanks for praying for me - it really paid off in the plague. I'll set you back up in the See as soon as I take Rome. Which should be within the year.

Dirty Deeds Done Dirt Cheap

Advanced Game, Plague, Famine, Special Military Units, Conquest, Moneylenders, Strategic Movement, Black Press, Standard Victory

Miller Number 2000Fpw10

Spring 1058

Deadline for Summer 1058 8/1, Tuesday

Pisa and the Muslims have joined forces against Venice and the Pope, with Byzantium mostly on the sidelines.

Fall 1056 Retreats

Pisa A Bologna retreats to Pistoia

Builds

The Muslims give 5 ducats to Pisa. Venice gives 1 ducat to the Pope

		Cost
Byzantines	Maintain F Durazzo, build G Durazzo	9
Muslims	Maintains all, builds A (Elite Mercenary) Naples, F Bari, F Messina, A Palermo	27
Papacy	Maintains A Florence, A Sienna, A Pisa	12
Pisa	Maintains all, builds A Lucca, A Piombino	24
Venice	Maintains all, builds A Padua, F Venice	18

Expenditures

Pisa spends 3 ducats for Famine relief in Parma.

Outstanding Debt

Fall 1058: 33 ducats due from Pisa (22 borrowed), 18 ducats due from Venice (12 borrowed), 4 ducats due from Pisa, (3 borrowed)

Fall 1059: 38 ducats due from the Byzantines (25 borrowed), 38 ducats due from the Muslims (25 borrowed), 3 ducats due from Venice (2 borrowed)

Orders

BYZANTINES (Robles): F (EM) DURAZZO to Lower Adriatic, G DURAZZO convert to E

MUSLIMS (Wilson): A (EM) Naples to ROME, A PALERMO holds, F Genoa to LIGURIAN SEA, F TYRRHENIAN SEA transports A Naples to Rome, F ANCONA supports F Bari to Lower Adriatic, E BARI to Lower Adriatic

PAPACY (Scott): A Florence to PISA, A Sienna to PATRIMONY, A (EM) Pisa to SIENNA

PISA (Roalstad): A PARMA supports A Cremona, A CREMONA supports A Modena to Mantua, A Modena to MANTUA, A PISTOIA supports A Lucca, A LUCCA support A Pistoia, A (EM) Arezzo to PERUGIA (Rebellion liberated), A PIOMBINO to Sienna

VENICE (Partridge): A MILAN supports A Mantua to Cremona, A Mantua to Cremona (DISLOADED, retreat Bergamo, Verona, Ferrara, Bologna, garrison, OTB), A Padua to TREVISO, A Treviso to FRIULI, F Bologna to UPPER ADRIATIC, F VENICE supports F Bologna to Upper Adriatic

Your treasury:

Spring 1057 Famine Losses

Muslim A Rome eliminated. If Venice retreats A Mantua to Bergamo, Verona, or Ferrara, it will be eliminated.

Summer 1057 Plague

Poor Year – Row Only. Firuli (Venice A eliminated), Rome, Pavia

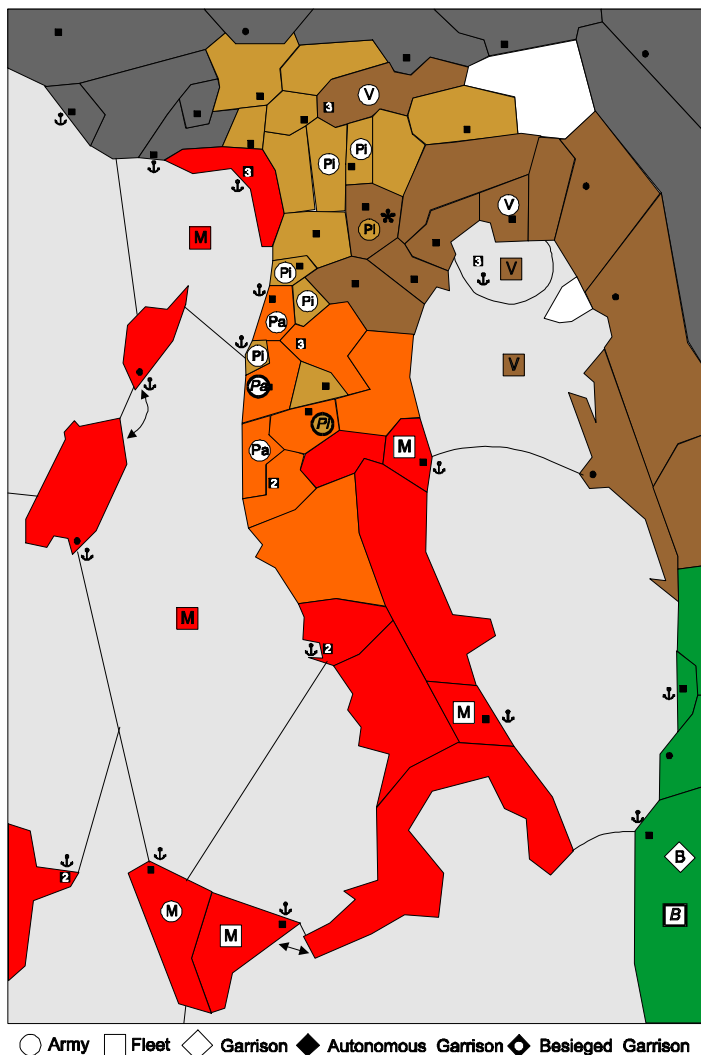
Press

Byzantines – Muslims: No, I'm sorry....

Papacy – Pisa: Good try, we'll see what happens here....

Pisa – Papacy: Going for my throat but your not protecting your own? Who will die first?

Dirty Deeds Done Dirty Cheap



Dogfight

Advanced Rules, Natural Disasters, Special Military Units, Conquest, White Press, Gunboat, Standard Victory Miller Number 2005Apw10 Spring 1457

Deadline for Summer 1457 9/12, Tuesday

Dark days for the Turks as Naples ejects him from his final home city. Venice continues to work against Austria, but gets no help from France. Florence makes gains against the Pope, but those are mostly negated by plague.

Fall 1457 Retreats

Austria retreats A Carinthia OTB (NRR)

Builds

	Cost
Austria: Maintains A Milan, builds A (Elite Mercenary) Hungary	9
Florence: Maintains all, build G Florence	15
France: Maintains all, builds A (Elite Mercenary) Avignon, A Swiss	18
Naples: Maintains all, builds A (Elite Mercenary) Palermo	24
Papacy: Maintains all, no new builds	18
Turks: Maintains all, no new builds	3
Venice: Maintains all, builds F Venice, A Padua	36

Orders

- AUSTRIA 🏹: A MILAN holds, A (EM) Hungary to AUSTRIA
- FLORENCE 🏹: A SIENNA to PISA, A FLORENCE supports A SIENNA to PISA, A (EM) Bologna to PISTOIA, G FLORENCE supports A Florence
- FRANCE 🏹: A Marseilles to PROVENCE, A SWISS supports Austrian A Tyrolea (nso), A (EM) Avignon to TURIN, A MONTFERRAT besieges (garrison eliminated), A PARMA supports Austrian A Milan
- NAPLES 🏹: A AQUILA to CAPUA, A (EM) Palermo to ALBANIA, F TYRRHENIAN SEA to CAPUA, F BARI supports F Lower Adriatic, F IONIAN SEA transports A Palermo to Albania, F DURAZZO supports F Lower Adriatic, F LOWER ADRIATIC transports A Palermo to Albania
- PAPACY 🏹: A ROME holds, A Urbino to BOLOGNA, A AREZZO supports A Pisa to Florence, A PISTOIA supports A Pisa to Florence (cut, DISLOADED, retreat Lucca, OTB), A Pisa to Florence (DISLOADED, retreat Lucca, garrison, OTB), A PISTOIA to Pisa
- TURKS 🏹: F Albania supports Venice F Herzegovina to Lower Adriatic (nso, ELIMINATED)
- VENICE 🏹: A (EM) Austria to TYROLEA, A CARINTHIA supports A Austria to Tyrolea, A TRENT to Milan, A CREMONA supports French A Parma to Milan (nso), A Mantua to FERRARA, A PADUA supports A Mantua to Ferrara, A Verona to FRIULI, F Carniola to UPPER ADRIATIC, F VENICE supports F Carniola to Upper Adriatic, F DALMATIA supports F Carniola to Upper Adriatic, F Herzegovina to RAGUSA

Your treasury:

Summer 1456 Plague

Poor Year – Column Only: Carniola, Dalmatia (Venice F destroyed), Messina, Pisa (Pisa A and Papal G destroyed), Perugia

Notes

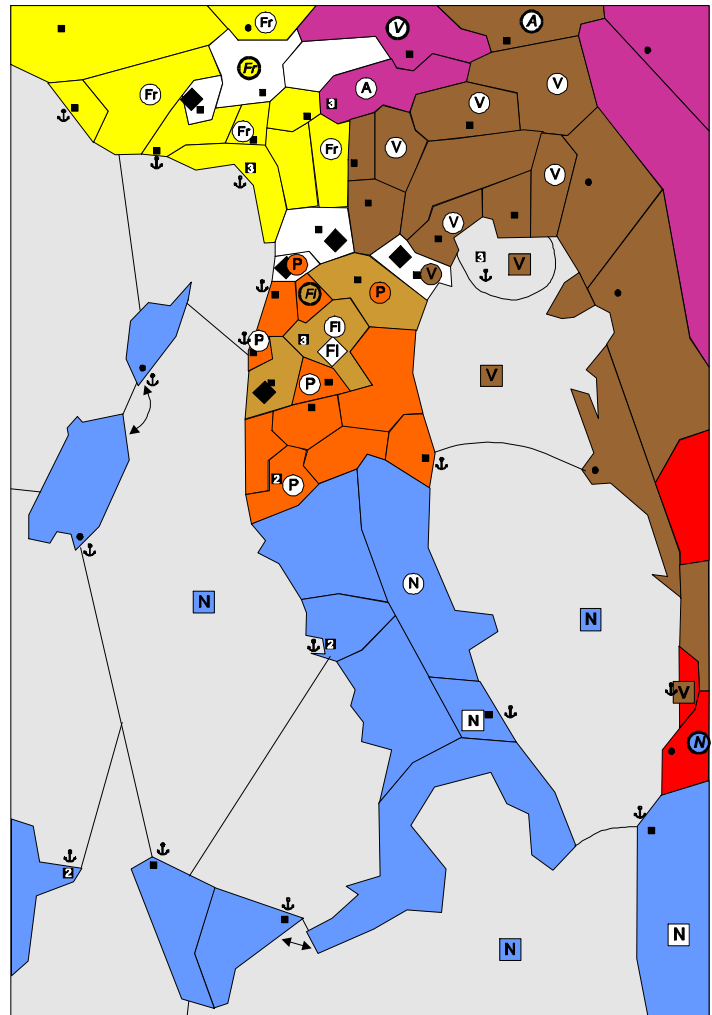
For purposes of the Plague results, I am assuming that the Pope is retreating A Pistoia to Lucca and A Pisa to garrison, since any other retreats result in either the same or more losses.

Press

Austria – France: Don't join the dark side!

Austria – Venice: OK, OK...I'm down to my last breath!

Dogfight



○ Army □ Fleet ◇ Garrison ◆ Autonomous Garrison ◆ Besieged Garrison

Florence – Pope: Hmm, Naples is looking pretty strong to your south. You better hope he picks Venice as a dance partner instead of you.

France – Austria: Hang on, I know Venice's horde is pouring through, but remember the moneylenders can give you a loan to buy yourself some more time.

France – Florence: To bad the Puppet Pope has lost his sense of reality around him. Madness in Rome's leaders has always been common.

France – Naples: You have one year, maybe two to put some pressure on Venice. Otherwise he'll be more like the Visigoths invading Rome.

France – Venice: How gracious of you to offer an Austrian owned Province. Now if you offer Cremona, I'll start to listen.

Naples – France and Austria: I hope to come up towards you two, slowly but constantly. France, if you need my TS fleet in LS, please you ask for it immediately.

Naples – Papacy: I hope that you finish early with Florence. We need you against Venice: he his too strong for us.

Papacy – Austria: You will fight to your last breath??? Here is the oxygen tank!!!

Papacy – Florence: You are correct fighting is pointless between us. If that is true, you should have disbanded ALL your units and given the money to me. That way at least one of us has a chance to compete against the megabuck rich Venice or the terror of the seas Naples.

Papacy – Venice: I hope Naples respects my neutrality. He doesn't want you to win too quickly. Because with Milan gone and Austria to follow who does that leave....Hmm...France, Papacy or Naples. Hmmm

Turk – All: Donations now being accepted for the Assassinate the Naplese fund. You know you all want to. If you all chip in it won't cost any of you much. All you all have to do is come up with 3 ducats.

Turk – Naples: You've got the easy pickings. Go away and leave me in my corner or I'll send the assassins over.

Turk – Venice: Go get him, I'll give you all the support I can.

Venice – Austria: Nothing needs to be said....

Venice – Florence: Fight on old brave one....

Venice – Naples: I am honor bound to complete my help to the Turk, tho it is obvious you are about to eliminate him. I tried to do it without hitting at you, and that occurred only once when we made equal moves. Your words warning me off are sincere, I am sure. But I also see them as a smoke screen because shortly you will be a 2 rated power by taking over all of the Turks holdings. I am still fighting Austria, and don't foresee gaining that advantage for at least another year...

Venice – Pope: Going Well I see... don't forget to look over your shoulder, about now Naples will have taken out the Turk, and have double the funds. And yes, he is talking about my moving south, but aren't you quite exposed right now...

Dogwood

Epoch VI Timurid Emirates, Incas & Aztecs, and Ottoman Turks

Epoch VI Portugal, Spain, and Mughals due: 9/12 Tuesday

Epoch VI

The Horde (Geggus) plays Famine in China (Hsuing-nu army Yellow River eliminated). **TIMURID EMIRATES:** Army and Capital Turanian Plain (Mongol army retreats to Tarim Basin), Western Steppe (vs. Seljuk Turks; T: 5, 3; S: 2; wins), Dnieper (vs. Holy Roman Empire; T: 6, 2; H: 1; wins), Central Europe (vs. Holy Roman Empire; T: 3, 2; H: 3; T: 4, 1; H: 1; wins, Capital reduced to city), Persian Plateau, Tarim Basin (vs. Mongols; T: 6, 4; M: 4, 3; T: 5, 2; M: 4, 3; wins), Dalmatia (vs. Byzantines; T: 4, 2; B: 6, 3; loses), Dalmatia (vs. Byzantines; T: 1, 1; B: 1, 1; T: 4, 2; B: 3, 1; wins). Builds Monument Turanian Plain. Points: Dominance in India (6), Eurasia (2), Presence in Middle East (2), China (3), Southern Europe (2), and Northern Europe (2), 2 Capitals (4), 2 cities (2), 5 Monuments (5), and 1 Sea (1) for 29 points.

Royal Manticoran Historical Society (Wilson) **INCAS:** 2 armies and Capital Northern Andes. **AZTECS:** Army and Capital Mexican Valley, army Pacific Seaboard. Builds Monument Northern Andes. Points: Presence in Southern Europe (2), Southeast Asia (2), North America (1), and South America (2), 2 Capitals (4), 2 Monuments (2), and 1 Sea (1) for 14 points.

Arachnids (Bolduc) plays Disaster (Volcano) in Eastern Ghats (Monument destroyed, Capital reduced to city). Plays Barbarians out of Plateau of Tibet. Tarim Basin (vs. Timurid Emirates; B: 4, 1; T: 3; wins), Wei River (vs. Mongols; B: 3, 1; M: 6, 3; loses). **OTTOMAN TURKS:** Army and Capital Western Anatolia (Seljuk Turk army retreats to Eastern Anatolia), army Eastern Anatolia (vs. Seljuk Turks; O: 5, 3; S: 6, 5; loses), Eastern Anatolia (vs. Seljuk Turks; O: 5, 1; S: 5, 1; O: 4, 3; S: 4, 1; O: 5, 3; S: 2, 2; O: 6, 1; S: 3, 1; wins), Zagros (vs. Mongols; O: 5, 3; M: 1; wins), Persian Plateau (vs. Timurid Emirates; O: 5, 1; T: 1; wins), Turanian Plain (vs. Timurid Emirates; O: 5, 2; T: 3; wins, Capital reduced to city), Tarim Basin, Levant, fleet Black Sea (vs. Retropolis; A: 6, 3; R: 3; wins), army Upper Tigris (vs. Arabs; O: 6, 4; A: 1; wins), Balkans (vs. Byzantines; O: 2, 2; B: 3; loses), Balkans (vs. Byzantines; O: 6, 3; B: 6; O: 6, 2; B: 1; wins, Capital reduced to city), fleet Eastern Mediterranean Sea (vs. Retropolis; A: 3, 1; R: 6; loses), Eastern Mediterranean Sea (vs. Retropolis; A: 6, 5; R: 4; wins), army Nile Delta (vs. Arabs; O: 1, 1; A: 6, 4; loses). Builds Monument Western Anatolia. Points: Dominance in Middle East (4), Presence in North Africa (2), China (3), India (3), Southern Europe (2), Northern Europe (2), Eurasia (1), and Sub-Saharan Africa (1), 1 Capital (2), 3 cities (3), 8 Monuments (8), and 2 Seas (2) for 33 points.

Players

Player Name	Player Faction Name/Color	Empire Strength Points	Victory Points
Kevin Wilson	Royal Manticoran Historical Society (purple)	43	119
Dennis Cain	Retropolis (red)	44	101
Chris Geggus	The Horde (yellow)	50	120
Dave Anderson	The Time Traveler (orange)	52	99
Andy Lewis	Marching Through the Ages (green)	56	143
Cary Nichols	Turanians (black)	58	77
Paul Bolduc	Arachnids (blue)	65	131

Positions

Turanians: Two fleets Red Sea. **MACEDONIA:** Two armies Pyrenees, army Western Iberia. **ARABS:** Army, Capital, and Monument Arabian Peninsula, army and Monument Nile Delta, armies Palestine, Nubia, Upper Nile, Middle Tigris. **SELJUK TURKS:** Army Persian Salt Desert.

The Horde: Fleet Bay of Bengal. **SCYTHEANS:** Army Caucuses. **MALAYAN KINGDOM:** Army, city, and fort Malayan Peninsula. **CHOLA:** Army and city Eastern Ghats, armies Ceylon, Western Ghats, Eastern Deccan, Western Deccan. **TIMURID EMIRATES:** Army, city, and Monument Central Europe, armies Dalmatia, Dnieper, Western Steppe.

Marching through the Ages: Fleets North Sea, South China Sea. **NORTH AMERICAN MIGRANTS:** Army West Indies. **MAYANS:** Army and Capital Central America, army Guyana Highlands. **HSUING-NU:** Army Yellow River. **T'ANG DYNASTY:** Army and fort East Indies. **VIKINGS:** Armies Scandinavia, Western Gaul, Central Massif, Lower Rhein. **JEWS:** Army, city, and fort Palestine. **MING DYNASTY:** Army, Capital and Monument Chekiang, army and Monument Yangtse Kian, Szechuan, armies Si-Kyang, Great Plain of China, Mekong, Manchurian Plain, Korean Peninsula.

Retropolis: CHOU DYNASTY: Two armies Irrawaddy. IBERIAN KINGDOM: Army, city, and fort Southern Iberia. HAN DYNASTY: Army Eastern Steppe. BYZANTINES: Armies Danubia, Pindus, Morea. HOLY ROMAN EMPIRE: Army and Monument Albion, armies Northern Gaul, North European Plain.

Royal Manticoran Historical Society: Fleet Western Mediterranean. GUPTAS: Two armies Sumatra. FRANKS: Army and Monument Southern Apennines, army Northern Apennines. INCAS: Two armies, Capital, and Monument Northern Andes. AZTECS: Army and Capital Mexican Valley, army Pacific Seaboard.

The Time Traveler: GOLD COAST KINGDOM: Army, city, and fort Gold Coast. MONGOLS: Army, city, and Monument Hokkaido, armies Mongolia, Wei River, Hindu Kush.

Arachnids: Fleets Black Sea, Eastern Mediterranean. SUB-SAHARAN MIGRANTS: Armies Central Africa and Congo Basin. ROMANS: Army, city, and Monument Shatts Plateau, army Libya. ANGLO-SAXONS: Armies Baltic Seaboard, Ireland. CIVIL WAR: Army Ganges Delta. REBELLION: Army Crete. OTTOMAN TURKS: Army, Capital, and Monument Western Anatolia, army, city, and Monument Turanian Plain, army and Monument Zagros, Levant, Upper Tigris, Persian Plateau, Tarim Basin, army and city Balkans, army Eastern Anatolia.

Event Cards

Epoch VI Empire

Salty Dog

Seafarers of Catan

Turns 10.3 to 11.3

Deadline Turns 11.4 to 12.4 9/12, Tuesday

Turn 10

Cary rolls a 9. Kevin and Dave each gain 1 grain, Cary and Ward each gain 1 ore. **Chris** rolls an 8. Kevin gains 1 wool, Cary gains 1 grain, Bill gains 2 lumber, Trades 1 ore to Chris for 1 wool. Trades 4 brick for 1 lumber. Builds a road from Chris gains 1 wool and 1 grain, and Ward gains 1 lumber and 1 grain. Chris builds E15 to E16. Chris builds a road from D12 to D11. a road from D11 to E11 and buys a card ().

Bill rolls a 5. Kevin gains 1 ore, Dave gains 2 lumber, Bill gains 1 wool, and Chris **Ward** rolls a 6. Dave gains 2 brick, Cary gains 1 brick, and Bill gains 1 ore. gains 1 lumber. Bill trades in 2 ore for 1 wheat and builds a settlement at G19. Builds road from C19 to C20.

Turn 11

Kevin plays a Knight card to move the Robber to Fields 8 space, stealing a brick **Dave** rolls an 11. Cary and Chris each gain 1 ore. Trades 6 grain and 3 brick for 3 from Cary. Rolls a 4. Dave gains 2 grain, Bill and Ward each gain 1 lumber. wool and builds ships from H17 to H18 and H18 to H19.

Kevin buys a card (). Cary rolls a 4. Dave gains 2 grain, Bill and Ward each gain 1 lumber. Passes.

Open Trades

None

Turn 11 Rolls

Bill 2 Chris 7 Ward 9

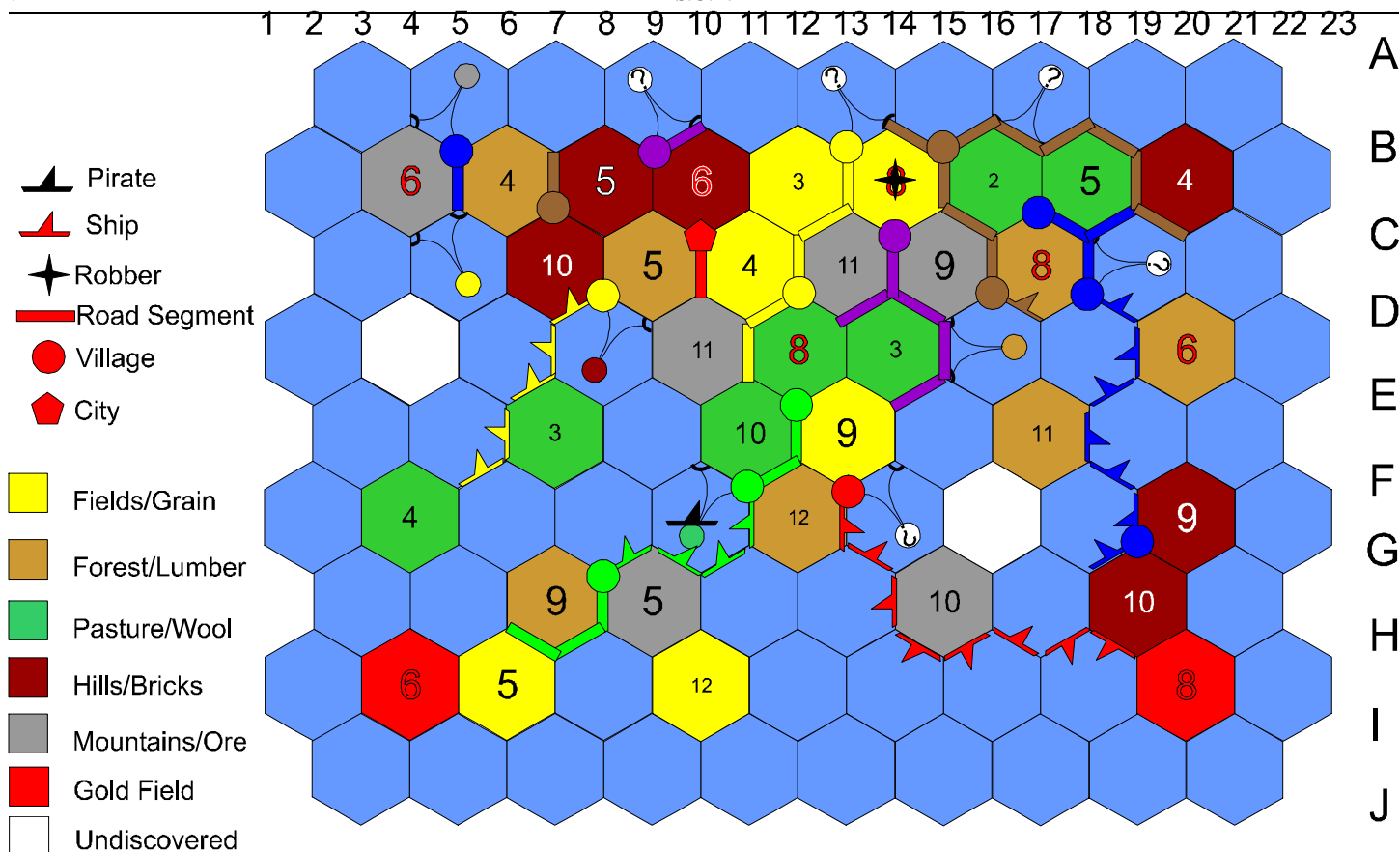
Turn 9 Rolls

Kevin 4 Dave 9 Cary 11 Bill 4

The Players

Player	Color	Grain	Wool	Brick	Lumber	Ore	Development Cards	VP
Kevin Wilson	Green		1	1		1	1 Knight, 1 Unknown ()	5*
Dave Partridge	Red	2	1	2	2			3
Cary Nichols	Purple	3	1			5		2
Bill Scharf	Blue		2		4	1		4
Chris Geggus	Yellow			1		1	1 Knight, 2 Unknown ()	3
Ward Narhi	Brown	2			2	2	1 Knight	3

* Longest trade route



Dog Chow

Age of Renaissance

Turn 2, Phase 7 and Turn 3, Phases 1 through 3

Deadline Turn 3 Phases 4 through 6 9/12, Tuesday

Turn 2, Phase 7: Purchase Tokens

Paris buys 30 tokens **Genoa** buys 18 tokens **Hamburg** buys 26 tokens **London** buys 12 tokens **Barcelona** buys 15 tokens. **Venice** buys 20 tokens.

Turn 3, Phase 1: Draw Cards

Done

Phase 2: Buy Cards

None eligible

Phase 3: Play Cards

London plays Timber (\$12 each to Barcelona and Hamburg, \$3 to Venice)

Barcelona plays Johann Gutenberg, Rebellion in Dijon, and Famine (Venice increases Misery to 20, Hamburg and London increase Misery to 30, Genoa increase Misery to 40, and Barcelona and Paris increase Misery to 50)

Genoa plays Civil War on Barcelona (chooses to lose 8 tokens) and Alchemist's Gold on Venice (loses \$31)

Venice plays Stone (Genoa gains \$4, Paris gains \$1, and shortage is removed)

Hamburg plays St Benedict (no protection) and Pirates/Vikings versus Bourges and Pairs.

Paris passes.

The Players

Player	Country	Misery	Tokens	Money	Order	Dominance	Ships	Advances
Paul Bolduc	Barcelona	50	7	\$95	2	10	2	E, I, N, R
Cary Nichols	Hamburg	30	26	\$53	5	6	4	
Bob Robles	London	30	12	\$58	1	7	4	A
Dennis Cain	Venice	20	20	\$34	4	9	4	
Steve Koehler	Genoa	40	18	\$55	3	8	4	N, R
Michael Longdin	Paris	50	30	\$52	6	5		I, W

Players are listed in reverse tie breaking order.

Played Leaders

Johann Gutenberg (30: O) (protected, Barcelona sole use)

St. Benedict (10: N, E) (played by Hamburg, no protection)

Commodity LogCards

Commodity	Bob	Cary	Michael	Steve	Paul	Dennis
Stone (2)	--	1	2	3	1	1
Wool (3)	4	--	--	1	2	--
Timber (4)	--	2	--	--	2	1
Grain (5)	1	1	1	--	1	2
Cloth (6)	--	1	1	3	--	2
Wine (7)	--	--	1	--	3	1
Metal (8)	1	1	1	1	1	--
Fur (9)	--	--	1	--	--	--
Silk (10)	--	--	--	--	1	1
Spice (11)	--	--	--	--	--	--
Gold (12)	--	--	1	--	--	--
Ivory (12)	1	--	--	--	--	1

Shortage, Surplus

Sled DogKremlinTurn 3, Cure through HealthDeadline Turn 3, Funeral Commission through Parade 9/12, TuesdayCure Phase

TCC declares 1 IP on Goferbrok and sends him to the Sanatorium. RODT plays Visit the Sanatorium (7) on Manjak (dr = 5, fails). Manjak ages to 64, Talksallott ages to 73, Doberman ages to 67, and Satin ages to 64.

Purge Phase

Badenuff attempts to purge I (dr = 7, success), H (dr = 3 fails). Ages to 59.

Spy Investigation Phase

Strychnin condemns H. RODT plays Izvestia (57). Strychnin ages to 68 and gains a ? marker.

Health Phase

Iwan Manjak (dr = 20) remains very healthy

Boris Badenuff (dr = 16) remains healthy

Antonj Talksallott (dr = 19) remains healthy

Mikail Strychnin (dr = 3) falls ill.

Igor Doberman (dr = 3) dies.

Alexei Goferbrok (dr = 6) remains sick.

Oleg Satin (dr = 16) remains healthy.

Leonid Bungaloff (dr = 11) remains healthy.

Politburo

Office	Policitian	Condition	Influence
Party Chief	Iwan Manjak (P)	64	8 (TI) , 4 (RODT), 7 (SPY)
KGB Head	Boris Badenuff (X)	59	3 (TI) , 2 (BAMBI)
Foreign	Antonj Talksallott (J)	73, ?	1 (TCC)
Defense	Mikail Strychnin (T)	68, ?, ++	2 (TCC), 9 (SPY), 10 (TI)
Ideology			
Industry	Alexei Goferbrok (C)	74, +	1 (TCC)

Office	Policitian	Condition	Influence
Economy	Oleg Satin (O)	64, ?	1 (TCC), 2 (SPY), 3 (BAMBI) , 3 (RODT)
Sport	Leonid Bungaloff (W)	54, strong	1 (RODT), 1 (BAMBI)

Politicians in **bold** are in the sanatorium.

Candidates: D, E, G

People: K, M, N, R, S, Y, Z

Siberia: B, F, H, I, Q, U, V

Kremlin Wall: A, L

PlayersIntrigue Cards

Player	Faction Name
Chris Geggus	Soviet Precocious Youths
Bill Scharf	Trotskyite Internationalists
Dennis Cain	Russian Olympic Drinking Team (RODT)
Bob Robles	Byelorussians Against Much Byzantine Interference (BAMBI)
Mike Scott	The California Connection
Michael	100%Stalinists
Longdin	

Undeclared Influence

Sirius

Merchant of Venus

Turns 3.3 to 4.3

Turns 4.4 to 5.4 9/12, Tuesday

Turn 33rd: Paul Bolduc (Eeepeep/R. Olivaw) Rolls Used: 4 * 4

Greathome(s) – Greathome(o) – B – Goliath(o) – R – B – Y – B10 – R10
 – Y10 – B – R – B – ? (it's a B20 penalty marker) – A – Jellybeast
 Landing(o).

4th: Dennis Cain (Niks/Space Revolver) Rolls Used: 1 6 6

Interstellar Biosphere – B – Y – (R) – Bypass – (R) – B – Y – (R10) – B106th:
 – (R) – B – Rainfall(o) – B – B – Rumble Port(o) – Rumble Port(s).

Discovers Niks (from the cup: Chiclé Liquor at 7a, Chiclé Liquor at 7a,
 Demand for Perfume at 3, Megalith Paperweight at 9b). Trades in IOU for a
 Shield.

5th: Chris Geggus (Qossuth/Atlantis) Rolls Used: 6 * 3

Y – R – B – R – Desolation Landing(o) – Desolation Landing(s).

Discovers Nillis (from the cup: Space Spice at 2, Space Spice at 2, Megalith
 Paperweight at 9b, and Chiclé Liquor at 7a). Trades in IOU for Bionic
 Perfume.

Bob Robles (Dell/Dells Without Names) Rolls Used: 2 3

Open Port – Y – B – R – B – Y.

Turn 41st: Andy Lewis (Humans/Mystery Machine 4) Rolls Used: 1 3 4

Wet Landing(s) – Wet Landing(o) – A – NC1 – Open Port.

Sells Voll Silk for \$220 (from the cup: Demand for Dust at 7a). Sells Voll
 Silk for \$220 (from the cup: Designer Genes at 9a). Buys Factory for \$200,
 Glorious Junk for \$100 (receives \$50 commission), and Space Spice for \$30.

2nd: Dave Partridge (Whynoms/Venus-Orion Oligarch Merchante) 3 4 4
 (uses Auto Pilot)

R – B – Y – B – R – ? (it's TeleGate 1) – Paintfall(o) – Paintfall(s).

Currently available:

1a (Nillis): 3 Bionic Perfume

1b (Volois): Nothing

2 (Graw): 2 Space Sice, Fare to 10 (\$120)

3 (Niks): 4 Mulch Wine, Demand for Space Spice (+\$60), Demand for Bionic
 Perfume (+\$60)

4a (Dell): 3 Finest Dust, Demand for Mulch Wine (+\$60),

4b (Humans): 4 Rock Videos, Demand for Space Spice (+\$40)

5 (Shenna): 3 Melf Pelts, Demand for Finest Dust (+\$50)

6 (Yxklyx): 2 Immortal Grease, 2 Demand for Melf Pelts (+\$50), Fare to 4b
 (\$120)

Discovers Zum (from the cup: Fare to 4b at 6, Mulch Wine at 3, Melf Pelts
 at 5, and Demand for Dust at 7a). Trades in IOU for Chiclé Liquor.

3rd: Paul Bolduc (Eeepeep/R. Olivaw) Rolls Used: 4 * 4

Jellybeast Landing(o) – Jellybeast Landing(s).

Discovers Dell (from the cup: Finest Dust at 4a, Demand for Wine at 4a,
 Bionic Perfume at 1a, and Demand for Dust at 7b). Buys Finest Dust for
 \$10.

7a (Zum): 3 Chiclé Liquor, 2 Demand for Finest Dust (+\$50)

7b (Eeepeep): 2 Servo-Mechanism, Demand for Immortal Grease (+\$50), Fare to
 Base (\$110), Demand for Finest Dust (+\$50)

8 (Whynoms): 3 Impossible Furniture, Demand for Chiclé Liquor (+\$60)

9a (Cholos): 5 Designer Genes, Demand for Immortal Grease (+\$50), Demand for
 Chiclé Liquor (+\$60)

9b (Wollow): Demand for Impossible Furniture (+\$70), Fare to 5 (\$110), 2
 Megalith Paperweights

10 (Qossuth): 3 Psychotic Sculpture, Demand for Designer Genes (+\$60)

Base: Nothing

1. Mystery Machine 4 \$225
 Normal Scout
 5: 3 4 6
 Hold1 Hold2 Hull
 Space Spice 2/\$80 Glorious Junk 2/\$200
 Graw \$200

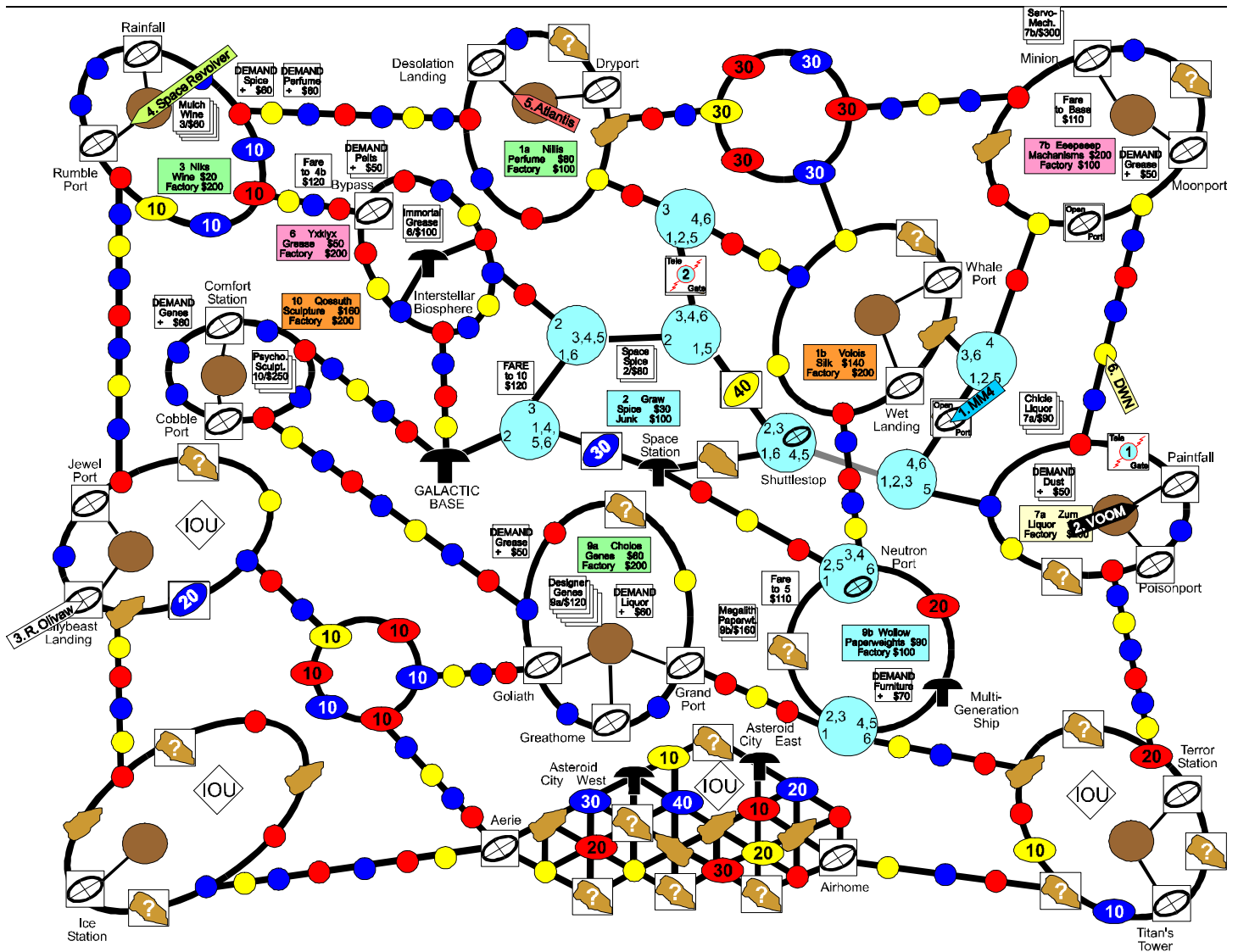
2. VOOM \$110
 Fast Scout
 5: 4 6 (Double 1)
 Hold1 Hold2 Hull
 Space Spice 2/\$80 Chiclé Liquor 7a/\$90
 RELIC Auto Pilot 4 \$80

3. R. Olivaw \$70
 Rocket Scout
 5: 6 6 (Use 1 * 4)
 Hold1 Hold2 Hull
 Finest Dust 4a/\$50 Shield (\$60)
 10 \$120 9a \$90 4a \$60

4. Space Revolver \$60
 Sports Scout
 4: 1 2 4 5/5: 2 4 4 6 (Use 3)
 Hold1 Hold2 Hull
 Immortal Grease 6/\$100 Red Eye (\$120) Shield (\$60)

5. Atlantis \$140
 Torch Scout
 4: 6 (Times 3)
 Hold1 Hold2 Hull
 Bionic Perfume 1a/\$140 Eq.

6. Dells Without Names \$140
 Scow Scout
 4: 2 2 4 6 (Use 2)
 Hold1 Hold2 Hull
 7b \$100



Outlaw Dogs

Turn 2

Turn 3 due 9/12, Tuesday

Actions

Segment 1

The Kid: Card (1) – Back Up (straight to F9), segment 1 of 2
Border Rider: Card 5 – Cock/Aim/Shoot (aim at J), segment 1 of 2
Gun Artist: Card 9 – Draw and Cock (W44 to both hands, cocked), segment 1 of 3
Innocente: Card 5 – Cock/Aim/Shoot (aim at K), segment 1 of 2
Drifter: Card 5 – Cock/Aim/Shoot (aim at J), segment 1 of 2
El Jefe: Card (1) – Back Up (straight to I5), segment 1 of 2

Segment 2

The Kid: Card (1) – Back Up (straight to F9), segment 2 of 2
Border Rider: Card 5 – Cock/Aim/Shoot (aim at J), segment 2 of 2
Gun Artist: Card 9 – Draw and Cock (W44 to both hands, cocked), segment 2 of 3
Innocente: Card 5 – Cock/Aim/Shoot (aim at K), segment 2 of 2
Drifter: Card 5 – Cock/Aim/Shoot (aim at J), segment 2 of 2
El Jefe: Card (1) – Back Up (straight to I5), segment 2 of 2

Segment 3

The Kid: Card B5 – Draw and Cock (cocks C45), segment 1 of 1
Border Rider: Card 6 – Cock/Aim/Shoot (aim at J), segment 1 of 2
Gun Artist: Card 9 – Draw and Cock (W44 to both hands, cocked), segment 3 of 3
Innocente: Card 6 – Cock/Aim/Shoot (aim at K), segment 1 of 2
Drifter: Card 6 – Cock/Aim/Shoot (aim at J), segment 1 of 2
El Jefe: Card 5 – Cock/Aim/Shoot (aim at D), segment 1 of 2

Segment 4

The Kid: Card 5 – Cock/Aim/Shoot (aim at G or shoot G), segment 1 of 2
Border Rider: Card 6 – Cock/Aim/Shoot (aim at J), segment 2 of 2
Gun Artist: Card 5 – Cock/Aim/Shoot (shoot at K), segment 1 of 2
Innocente: Card 6 – Cock/Aim/Shoot (aim at K), segment 2 of 2
Drifter: Card 6 – Cock/Aim/Shoot (aim at J), segment 2 of 2
El Jefe: Card 5 – Cock/Aim/Shoot (aim at D), segment 2 of 2

Segment 5End of Turn

The Kid: Card 5 – Cock/Aim/Shoot (aim at G), segment 2 of 2 No actions.

Border Rider: Card 7 – Shoot (at J, total effective aim time = 6, BE becomes VITAL, KILLED, card 26 drawn)

Gun Artist: Card 5 – Cock/Aim/Shoot (shoot at K, total effective aim time = 3, misses, card 81 drawn)

Innocente: Card 7 – Shoot (at K, total effective aim time = 4 (+6 shotgun bonus), VITAL hit, KILLED, card 64 drawn)

Drifter: Card (B3) – Shoot (at J, total effective aim time = 8, BE becomes VITAL, KILLED, card 23 drawn)

El Jefe: Passes

Westerners

Side	Player	Character	Location	Bonus Cards	Skills	Delay	Endurance	Comments
A	Paul Bolduc	The Kid (K)	F9>F8	2, 2	1H +3, OH -1		0	Dead
B	Andy Lewis	Border Rider (B)	F3>F4	3	1H +2, 2H +2		20	
C	Dave Partridge	Gun Artist (G)	G9>F8		1H +3, 2H +3, OH 0		20	Down
D	Jerry Roalstad	Innocente (I)	D4>E5	7, 8	1H +2		25	
E	Chris Geggus	Drifter (D)	D7>E7	3	2H +2		20	
F	Mike Scott	El Jefe (J)	I5>H5		2H +2		0	Dead

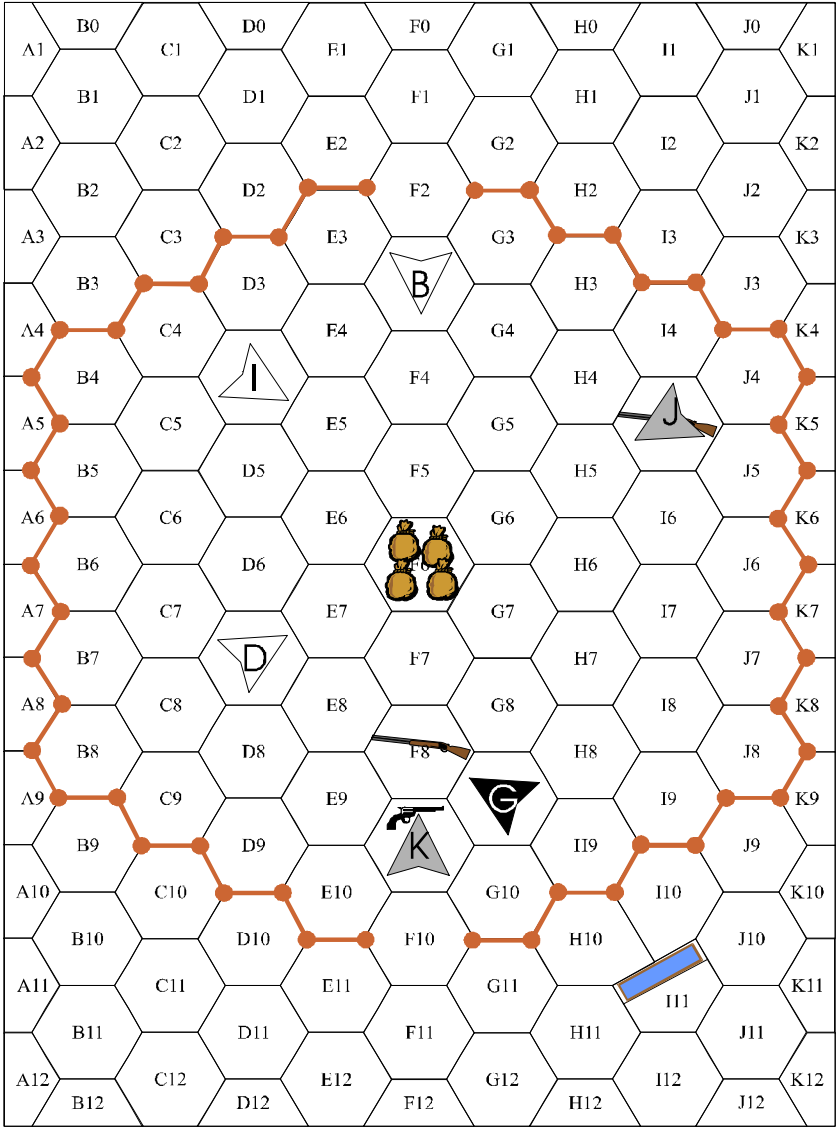
Weapons

Character	Holstered	Gun Hand	Other Hand	Both Hands	Ammo
The Kid	C32, Knife	Empty	Empty	Empty	C32: OOOOOO
Border Rider	C45, R41d	Empty	Empty	H44 (uncocked)	H44: OOOOOOOOOOOOOO☞ C45: OOOOOO R41d: OO
Gun Artist	C45, SW38	Empty	Empty	W44 (uncocked)	W44: OOOOOOOOOOOOOOOO☞ C45: OOOOOO SW38: OOOOOO
Innocente	C45, C45, Knife	Empty	Empty	R10 (uncocked)	R10: O☞ C45: OOOOOO C45: OOOOOO
Drifter	C44, C32, Knife	Empty	Empty	W44 (uncocked)	W44: OOOOOOOOOOOOOOOO C44: OOOOOO C32: OOOOOO
El Jefe	C44, C44, Knife	Empty	Empty	Empty	C44: OOOOOO C44: OOOOOO

On the ground in F8: W44: OOOOOOOOOOOOOOOO

On the ground in F9: C45: OOO☞☞☞

On the ground in I5: W44: OOOOOOOOOOOOOOOO☞



Fence
Water Trough



Player (up)



Gun (one handed)



Knife



Money Bag



Player (down)



Gun (two handed)



Aim Points



Player (dead)

Doberman**Turn 1b****Turn 2a due 9/12, Tuesday****Cards**

100%Trash	BIBCO	PIT	GOO
Innovation	Innovation	Advisor	Waste Disposal
Order	Growth	Waste Disposal	Raw Materials
Growth	Order	Growth	Order

100%Trash plays Growth to increase Growth to 15

BIBCO plays Growth to increase Growth to 15

PIT plays Growth with an Advisor, to increase Growth to 16

GOO plays Raw Materials, auctioning off 5 raw materials. 100%Trash bids \$8, and gets it.

100%Trash plays Innovation, spending \$5 to improve Raw Materials to 4/3.

BIBCO plays Innovation, spending \$5 to improve Waste Reduction to 4/3.

PIT passes

GOO plays an Order, expending 5 raw materials, and producing \$14 and 5 waste.

100%Trash passes

BIBCO plays an Order, expending 5 raw materials, and producing \$15 and 4 waste.

PIT passes

GOO plays Waste Disposal, reducing his waste to 2

All players spend \$5 for maintenance. 100%Trash takes out a loan.

Press

PIT – Boss: So much for my predictions as to what others would pick.

PIT – Eric: What, a new strategy?

Michael – All: If you could see my house, you'd realize that I'm actually not very good at dealing with rubbish. I'll name my company in line with other games (and my on-line name on various game sites).

The Players

Player	Company Name	Play Order	Money	Loans	Raw Material Supply	Growth	Co-workers	Saved Card
Michael Longdin	100%Trash	4	\$7	10	10	15	5	Order
Dave Partridge	BIBCO	1	\$20	0	0	15	5	
Richard Weiss	PIT	2	\$10	0	5	16	5	Waste Disposal
Eric Brosius	GOO	3	\$24	0	0	14	5	

GOO stands for General Olfactory Organization. BIBCO stands for Big Industry Buying Congressmen Outright

Player	Rationalization	Raw Materials	Waste Reduction	Waste Disposal	Victory Points
Michael Longdin	5/1	4/3	5/1	0	14
Dave Partridge	5/1	5/1	4/3	4	30
Richard Weiss	5/1	5/1	5/1	0	24
Eric Brosius	5/1	5/1	5/1	2	29

Available Cards

Set 1	Set 2	Set 3	Set 4	Set 5
Hiring/Firing	Waste Disposal	Growth	Raw Materials	Growth
Innovation	Bribery	Waste Disposal	Waste Disposal	Order
Waste Disposal	Order	Bribery	Innovation	Waste Removal

Discards

Raw Materials Growth Raw Materials

Jackal**Turn 2****Turn 3 due 9/12, Tuesday****Planning**

English maintain 4 ships (\$16) and buy 4 Soldiers (\$4) for \$56.

French maintain 3 ships (\$12) and buy 2 soldiers (\$20) for \$32.

Portuguese maintains 3 ships (\$12), buys 1 ship (\$12) and 4 soldiers (\$40) for \$64.

Spanish maintains 2 ships (\$8), buy 2 ships (\$24) and 3 soldiers (\$30) for \$62.

Dutch maintain 4 ships (\$16) and buy 4 Soldiers (\$40) for \$56.

Swedes maintain 1 ship (\$4), buy 2 ships (\$24) and 2 soldiers (\$20) for \$48.

Outbound Naval Movement

English Move to U. Dice: 4, 4, 5, 6. No losses.

French Move to D. Dice: 5, 6, 6. No losses.

Portuguese Move to U. Dice: 1, 3, 3, 6. Loses 1 colonist and 1 soldier.

Spanish Move to J. Dice: 1, 2, 3, 6. No losses. Unload 1 colonist and 1 soldier, move to L. Dice: 1. Loses 1 colonist and 1 soldier.

Dutch Move to N. Dice: 3, 3, 6, 6. No losses.

Swedes Move to W. Dice: 2, 2, 5, 6, 6. No losses.

Mining

None

Exploration

None

Land Movement

English move 2 soldiers from R to U. Move 4 soldiers and 4 colonists from fleet to U.

French move 1 colonist and 1 soldier from H to C. It's a climate 2 area with 1 native. Moves 1 soldier from H to G. It's a climate 3 area with 2 natives. Moves 4 colonists and 2 soldiers from fleet to D. It's a climate 3 area with 1 site and 2 natives.

Portuguese move 1 colonist and 2 soldiers from U to X. It is a climate 3 area. Moves 3 colonists and 3 soldiers from fleet to U. One soldiers prospects.

Spanish move 1 soldier from J to I. It is a resource rich climate 3 area with the x4 city and 8 natives. Moves 1 soldier from J to F. It is a resource rich climate 3 area with 1 site and 2 natives. Moves 1 colonist and 1 soldier from anchorage dot to J, and 3 colonists and 1 soldier from fleet to L. It is a climate 1 area with 1 site and 2 natives.

Dutch moves 1 soldier and 1 colonist from O to N. It is a climate 4 area with 1 native. Move 4 soldiers and 4 colonists from fleet to N.

Swedes move 4 colonists and 2 soldiers from fleet to Y. It is a climate 1 area with 1 site and 3 natives. One soldier prospects.

Combat

English attack Portuguese in U. 2 Portuguese soldiers and 1 Portuguese prospector killed. 3 Portuguese colonists retreat to X.

Native Combat

Spanish: 2 natives killed in F, 1 soldier killed in I, and 1 soldier killed in J.

Native Uprisings

Climate is a 2. Uprisings in D (2 colonists killed), L (2 colonists killed), W (3 colonists killed), and Y (2 colonists killed).

Survival

Climate is a 1.

French lose 1 colonist and 1 soldier in C, 1 colonist and 2 soldiers in D, and 1 soldier in G. **Spanish** lose 1 soldier in F, and 1 colonist each in J and L. **Dutch** lose 1 colonist and 1 soldier in N, and 2 colonists and 2 soldiers in O. **English** lose 1 colonist each in R and U. **Portuguese** loses 1 colonist and 2 soldiers in X. **Swedes** lose 1 colonist and 2 soldiers in W, and 1 soldier in Y.

Political Control

Dutch gain political control of N. **English** lose political control of R.

Homebound Naval Movement

English: Dice: 2, 3, 3, 6. No losses.

French: Dice: 1, 4, 4. No losses.

Portuguese: Dice: 1, 2, 5, 6. No losses.

Spanish: Dice: 3, 3, 3, 3. No losses.

Dutch: Dice: 1, 2, 3, 6. No losses.

Swedes: Dice: 1, 2, 3, 4, 5. No losses.

Income

English: Political Control: \$20, resources: \$9.

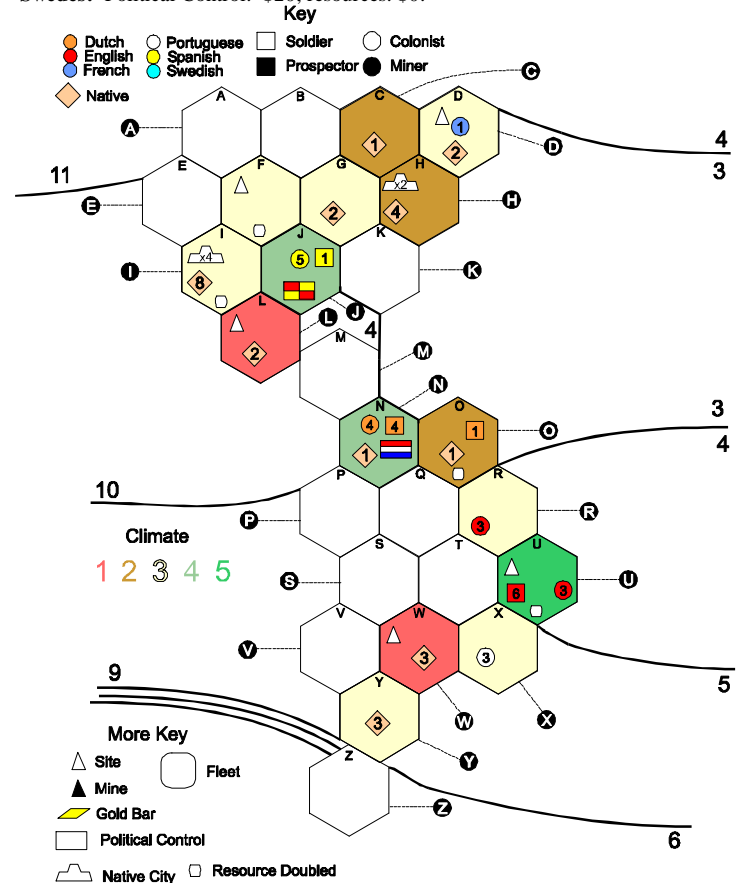
French: Political Control: \$20, resources: \$1.

Portuguese: Political Control: \$20, resources: \$3.

Spanish: Political Control: \$40, resources: \$5.

Dutch: Political Control: \$40, resources: \$4.

Swedes: Political Control: \$20, resources: \$0.



Turn 3 Initiative

Swedes, Spanish, French, Portuguese, English, Dutch

Players

Country	Player	Money	Available Soldiers	Ships	Colonists
Dutch	Dave Partridge	\$88	16	4	4
English	Bob Robles	\$89	16	4	4
French	Andy Lewis	\$112	19	3	4
Portuguese	Brendan Whyte	\$85	18	4	4
Spanish	Andy York	\$110	18	4	3
Swedish	Cary Nichols	\$98	20	3	4

Pedagogy

In past columns, I have written about the fundamental conflict between general relativity and quantum mechanics. Perhaps no phenomenon exemplifies that conflict more than black holes. Here we have the essence of general relativity; a region of space where gravity is absolutely dominant, yet quantum effect can be quite important. Recently, a scientist name Chapline at Lawrence Livermore National Laboratory came up with an hypothesis that may fundamentally change the understood nature of black holes.

To fully understand Chapline's concept, we have to review black holes themselves as understood by general relativity. When matter is compressed to a particular point, defined by its mass and denoted the Swartzchild radius after the German physicist who first solved general relativity's equations for this case, something strange happens. The surface at the Swartzchild radius becomes a surface of infinite redshift – no matter or energy can escape to the outside from inside. Time and space change places inside that surface. By this, it means that the radial direction inside becomes timelike; you can only move in one direction along that dimension, and you cannot fully control your movement in that dimension. Just like normally, you move forward in time, and can control your “time velocity” only by moving faster or slower (to induce time dilation) in the other dimensions. Inside the black hole, you will move toward the center, the only question is how fast. For quantum mechanics, this is a problem, because quantum mechanics requires some kind of universal time. In a classical black hole, the time inside the event horizon is totally separate from that outside. Why does quantum mechanics require universal time? It is due to something called quantum entanglement. Let's say that there is a particle that decays into two photons. The photons are emitted in opposite directions and the quantum spins of the photons have opposite parity. Given these conditions, if you measure the spin parity of one of the photons, you instantaneously know the spin parity of the other. It doesn't matter if the other photon is half way across the universe – the information of its spin parity is instantly known to you. Einstein himself called this “spooky action at a distance.” But what is the concept of “instantly” if one of the photons got sucked into a black hole? The whole concept breaks down.

Another quality of black holes within general relativity is that they destroy information. Given a black hole, you can tell only three things about it: It's mass, its electric charge, and its rate of rotation. All other information that went into its making is lost. Destruction of information, however is a clear violation of quantum mechanics. In quantum mechanics, information can be transformed, but never destroyed. Stephen Hawking himself believed that black holes could destroy quantum information until recently, when he figured a way that the information could be “encoded” into the event horizon itself. In order to do this,

he had to invoke quantum concepts, so our understanding of black holes has changed.

So, what did Chapline come up with? He first considered a form of condensed matter confined in a vertical tube. At a certain depth in this tube, the speed of sound in the material shrinks to zero. This is conceptually equivalent to an event horizon. So, he thought, what if space is something akin to this condensed matter state? If subjected to enough stress, which the collapse process could easily do, perhaps it changes phase in some way, similar to how water can flash to vapor when subjected to enough heat. This other phase of space would be characterized by a vastly higher vacuum energy – one that would be high enough to counteract the gravitational pull of the collapsing matter, but not enough to reverse it. What is produced is a dark energy star.

The boundary between these two phases of space would have some unusual properties. Any particles above a certain energy threshold, which would include all quarks and gluons inside nucleons, which impact this surface, decay. A quark, for example, would decay into a positron and two antiquarks. The antiquarks would then annihilate with quarks inside the star, but the positron would be reflected back. Less energetic particles would fall through the surface, be bent around by the internal geodesic, and eventually thrown out in a different direction. An interesting observation is that this phenomenon would produce an excess of positrons from black holes. Such an excess is observed emanating from the core of our galaxy, where a super massive black hole is thought to reside. Furthermore, the energy spectrum of these positrons matches closely with that predicted by this theory.

Another potential coup for this theory is a possible explanation for dark matter. If the normal state of space is close to the transition point to this high dark energy phase, it is possible that large quantities of microscopic dark energy stars were created in the primordial universe. If that is the case, they could easily have persisted to this day. Unlike microscopic black holes, they would not decay via Hawking radiation because the surface is fundamentally different from the event horizon of a black hole. So, these microscopic dark energy stars could easily constitute dark matter.

Is the theory correct? No one knows at this time. It has the advantages that it fully agrees with quantum mechanics, does not require any new fundamental particles, and explains the excess of positrons from the center of our galaxy. Beyond that, it is rather difficult to test, given the lack of black holes in our vicinity (something we should perhaps be thankful for). It remains an intriguing idea that we will perhaps be able to test one day.

Next issue I will talk about six common misconceptions about the big bang.



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Standbys

Anybody who gets onto my standby list automatically receives one free issue of *S.O.B.* In addition, if you actually submit standby orders, you get another free issue. So, let's get those people standing by. The current standby list is:

Machiavelli (gunboat and regular): Steve Koehler, Bill Scharf, Bob Robles, Mike Scott, Ward Narhi, Paul Bolduc, Pasquale Giovine, Andy York, Cary Nichols, Lee McConnell, Dave Partridge, Dale Horsely **Dune:** Steve Koehler, Paul Bolduc, Kevin Wilson, Ward Narhi, Andy York, Cary Nichols, Bill Scharf, Dave Partridge **New World:** Andy York, Bill Scharf, Cary Nichols, Dave Partridge **Merchant of Venus:** Paul Bolduc, Carrie Lewis, Bob Robles, Andy York, Cary Nichols, Dave Partridge **Outpost:** Michael Lowrey, Kevin Wilson, Andy York, Cary Nichols, Bill Scharf, Dave Partridge **History of the World:** Andy Lewis, Paul Bolduc, Kevin Wilson, Chris Geggus, Andy York, Cary Nichols, Dave Partridge **Stellar Conquest:** Paul Bolduc, Kevin Wilson, Andy York, Cary Nichols, Dave Partridge **Liftoff!:** Dennis Cain, Andy York, Cary Nichols, Bill Scharf, Dave Partridge **Age of Renaissance:** Bob Robles, Michael Lowrey, Cary Nichols, Dave Partridge, Michael Longdin **Kremlin:** Andy York, Andy Lewis, Pasquale Giovine, Cary Nichols, Bill Scharf, Dave Partridge, Michael Longdin **Silverton:** Cary Nichols, Bill Scharf, Dave Partridge **Settlers of Catan:** Michael Lowrey, Chris Geggus, Cary Nichols, Dave Partridge **Gunslinger:** none **Industrial Waste:** Michael Longdin

Standby Calls

None this issue