Diffusion

Diffusion

relationships among people and objects that cross the barrier of space

- **Assimilation**
  - a group's cultural features are altered to resemble this of another group
- **Acculturation**
  - changes in culture that result from the meeting of two groups
  - two groups retain two distinct culture features
- **Syncretism**
  - combination of elements of two group into a new cultural feature.
  - merge to form a new culture

Diffusion

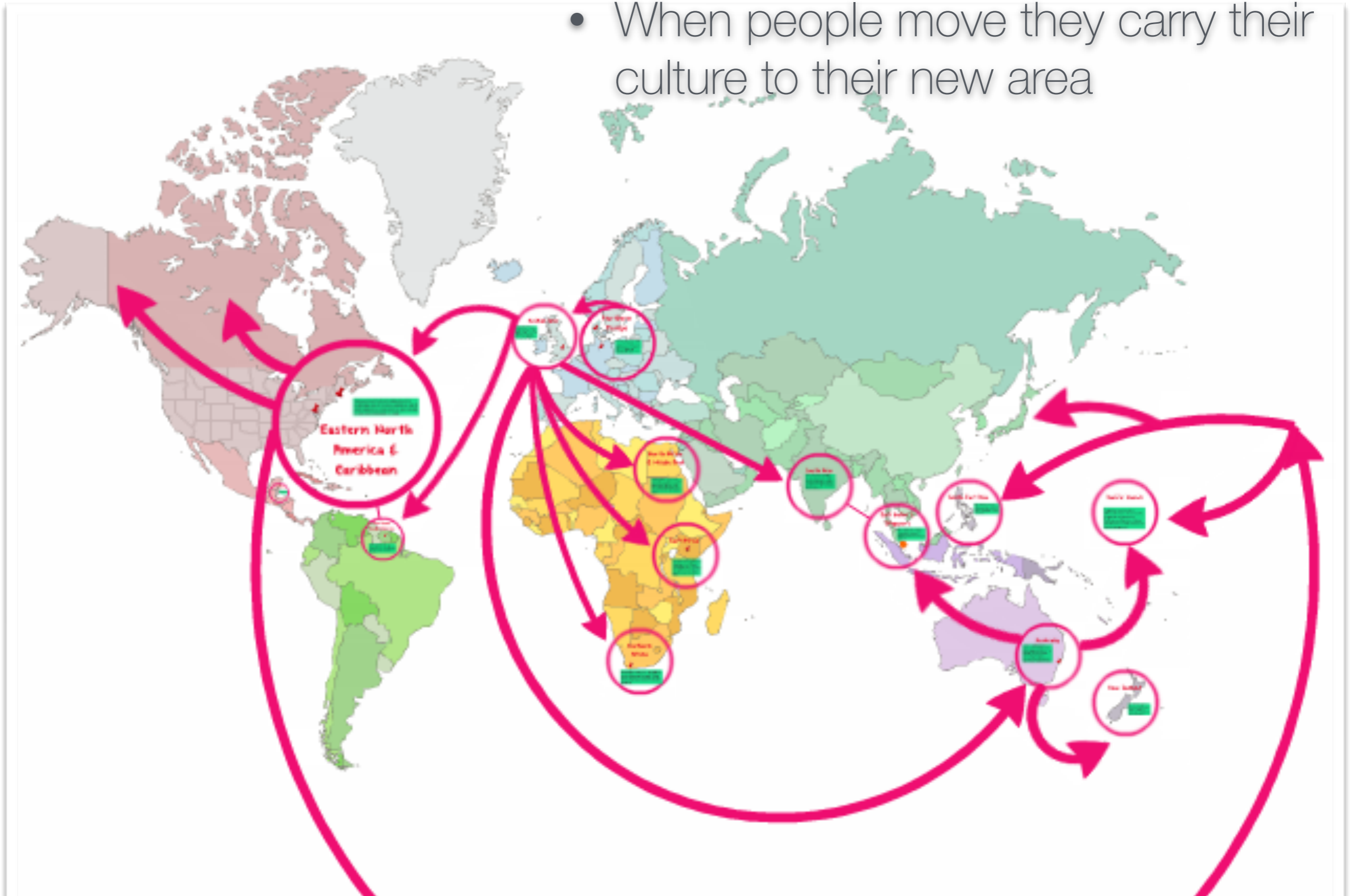Hearth - the place where the innovation originates

Where did Hip Hop start?
Where was the first case of AIDS discovered?
How did the English Language spread over the world?

Relocation Diffusion

- The physical movement of an idea from one area to another
- When people move they carry their culture to their new area

Expansion Diffusion

Hierarchial Diffusion
- spread of an idea from persons or nodes of authority or power to other persons or places.
-innovations originate in a node (large urban center) and diffuse to the periphery (Hip-Hop)
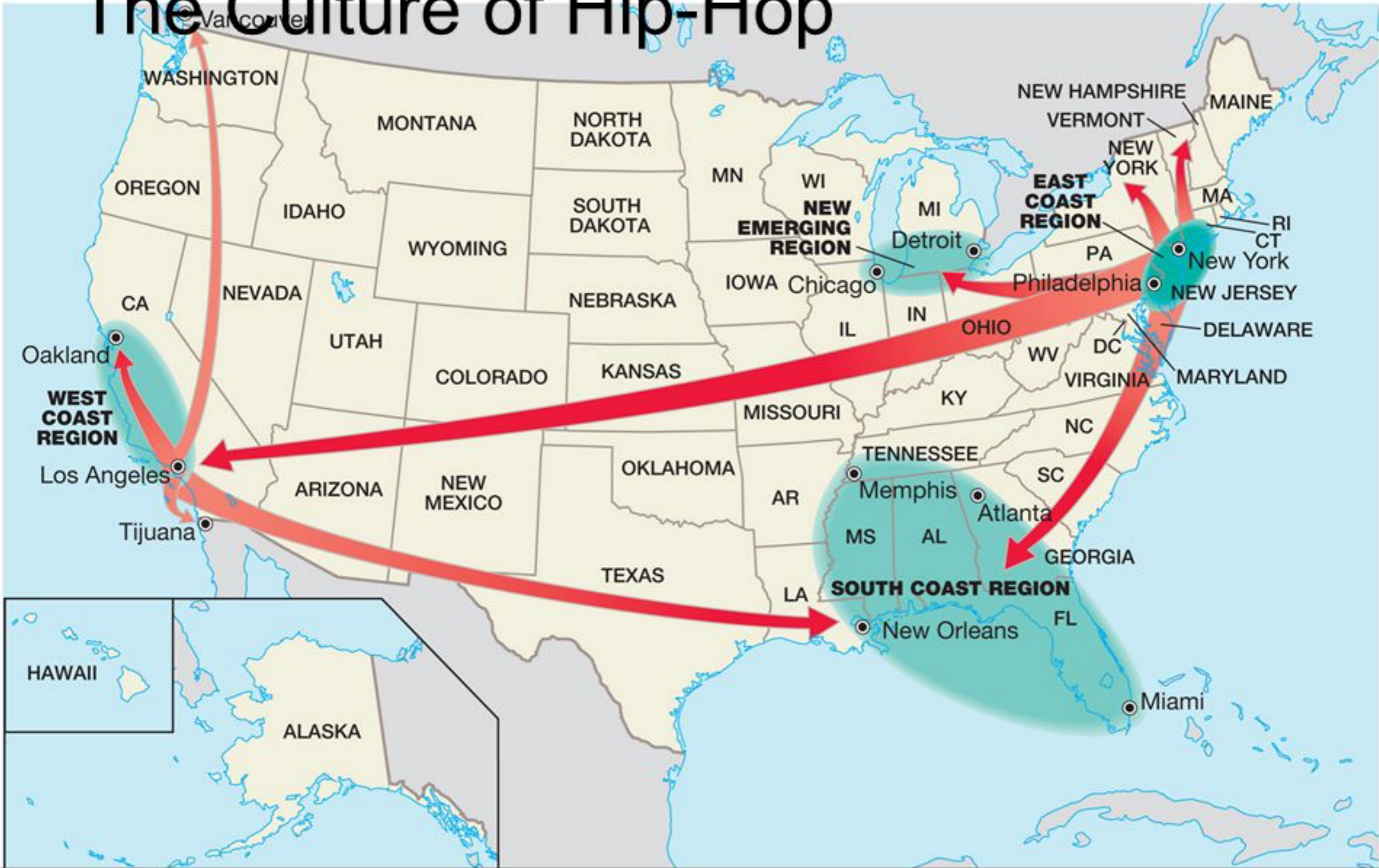Technology enhances - internet, twitter, etc.

Contagious Diffusion
- rapid widespread diffusion of a characteristic throughout the population. (going viral or a new strand of influenza)
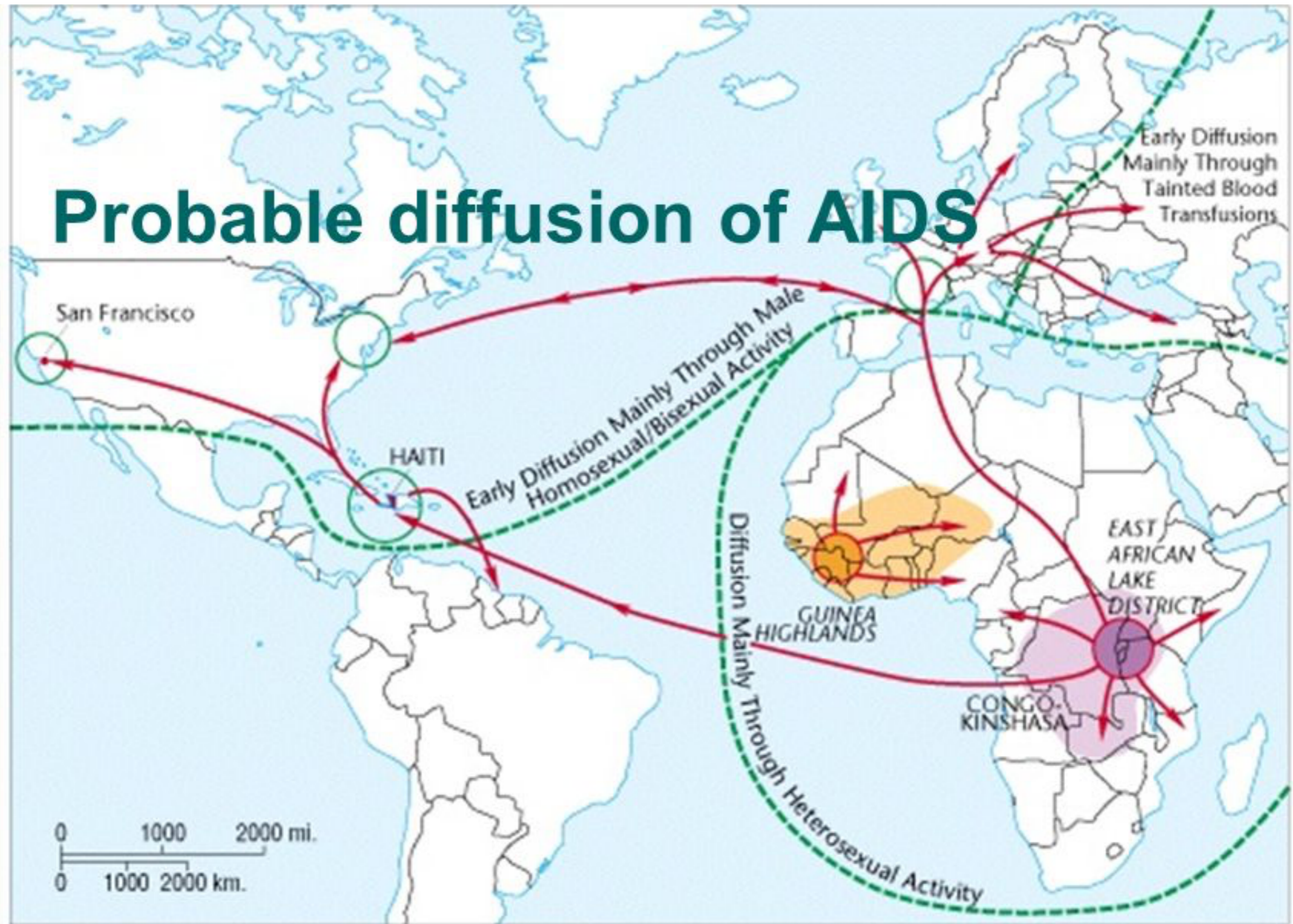
Stimulus diffusion
- the spread of an underlying principle even though a characteristic itself apparently failed to diffuse
-also encourage by technology

The Culture of Hip-Hop

Probable diffusion of AIDS

Early Diffusion Mainly Through Tainted Blood Transfusions

San Francisco

Early Diffusion Mainly Through Male Homosexual/Bisexual Activity

Diffusion Mainly Through Heterosexual Activity

HAITI

GUINEA HIGHLANDS

CONGO-KINSHASA

EAST AFRICAN LAKE DISTRICT

0   1000   2000 mi.

0   1000 2000 km.

Origin of HIV-1, 1950s   Origin of HIV-2   ➡ Path of diffusion

HIV-1 endemic by 1985   HIV-2 endemic by 1985   ◯ Secondary centers of diffusion

Stimulus Diffusion

PCWorld

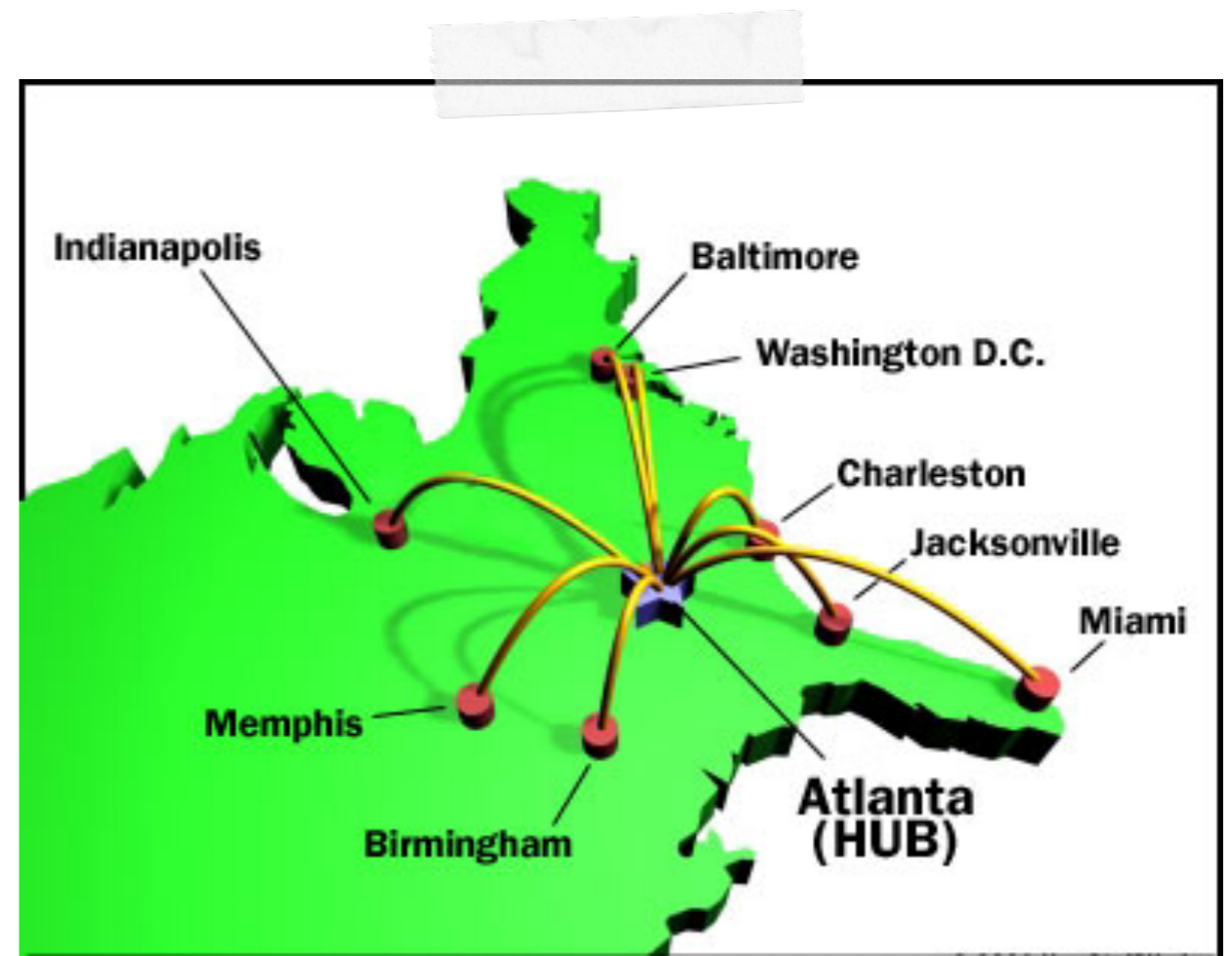|	HP Slate 500	Samsung Galaxy Tab	Apple iPad WiFi	Apple iPad WiFi+3G	RIM BlackBerry PlayBook
Price	$799	$599	$499/$599/$699	$629/$729/$829	Unspecified
Carrier	✗	Verizon (contract-free)	✗	AT&T (contract-free)	✗
On-Board Storage	64GB	16GB/32GB	16GB/32GB/64GB	16GB/32GB/64GB	16GB/32GB
Operating System	Microsoft Windows 7	Google Android 2.2	Apple iOS 3.2 (4.2 in November)	Apple iOS 3.2 (4.2 in November)	RIM BlackBerry Tablet OS
Display Size	8.9" TFT LCD	7" TFT LCD	9.7" IPS	9.7" IPS	7" TFT LCD
Display resolution	1024 x 600 pixels	1024 x 600 pixels	1024 x 768 pixels	1024 x 768 pixels	1024 x 600 pixels
Size	9.21" x 5.7" x 0.57"	7.48" x 4.74" x 0.47"	9.56" x 7.47" x 0.5"	9.56" x 7.47" x 0.5"	7.6" x 5.1" x 0.4"
Weight	1.5 pounds (680g)	0.81 pounds (368g)	1.5 pounds (680g)	1.6 pounds (730g)	0.88 pounds (400g)
Processor	1.86GHz Intel Atom Z540	1GHz ARM Cortex A8	1GHz Apple A4	1GHz Apple A4	1GHz Dual Core
RAM Memory	2GB	512MB	256MB	256MB	1GB
Storage expansion	SD card (up to 32GB)	microSD (up to 32GB)	✗	✗	✗
WiFi	802.11 n	802.11 b/g/n	802.11 a/b/g/n	802.11 a/b/g/n	802.11 a/b/g/n
Cellular Network	✗	CDMA	✗	GSM/EDGE/UTMS/HSDPA	✗
Battery Life	5 hours	7 hours	10 hours WiFi-only	9 hours 3G-only	Unspecified
GPS	✗	✔	✗	✔	✗
Bluetooth	✔	Bluetooth 3.0	Bluetooth 2.1 + EDR	Bluetooth 2.1 + EDR	Bluetooth 2.1 + EDR
Camera	3-Megapixel + Flash	3.2-Megapixel + Flash	✗	✗	5-Megapixel + 1080P HD video
Video Calling Camera	VGA	1.3-Megapixel	✗	✗	3-Megapixel
HDMI out	Via Dock	Via Dock (Sold Separately)	✗	✗	microHDMI
USB	1 USB 2.0	30-pin connector only	30-pin connector only	30-pin connector only	microUSB
Multitasking	✔	✔	With iOS 4.2	With iOS 4.2	✔
Phone Functionality	✗	✗	✗	✗	✗
Tethering	✔	✔	✗	✗	✔
Adobe Flash Support	✔	✔	✗	✗	✔
Application Store	No dedicated store	Android Market	Apple App Store	Apple App Store	BlackBerry App World

Connections: Spatial Interactions

interactions take place through network, a chain of communication that connects places.

- **Distance Decay**
  - the father away someone is from another, the less likely they are to interact
- **Space-Time Compression**
  - reduction in time it takes for something to reach another place
  - ideas that originate in a hearth diffuse rapidly through communication networks
  - Modern networks make it faster for us to know information

FALLING COSTS OF COMMUNICATIONS

REDUCING TIME LAPSE OF INFORMATION TRANSMISSION

1500–1840

Best average speed of horse-drawn coaches
and sailing ships was 10 mph

1850–1930

Steam trains averaged
65 mph
Steam ships averaged 36 mph

Time/space convergence affects some places more than others. It depends on the connections

Morse code

to telephone

to satellite

to fibre optics/ internet

and broadband

1950s

Propeller aircraft
300–400 mph

1960s

Jet passenger aircraft
500–700 mph

1990s
Cyberspace
information in seconds

How fast do we receive and send communication now?

How small has our world become because of it?