In [82]:

```
# convert each article row of a cdf to a "user-friendly" html format
def row_to_html(row):
   # note: row is a tuple with two elements
   \# row[0] = row index
   # row[1] = Series
   # Let's redefine row as the Series
   row = row[1]
   # article title
   p_title = "<h3>"+row["atitle"]+"</h3>"
   # article newspaper & date
   p_paper_date = ""+row["anewspaper"]+"\t"+row["adate"]+"""
   # article id
   p_id = "ID "+row["aid"]+"""
   # overall rank
   p_rank = "Article Rank: "+str(row["Overall_Rank"])+""""
   # article content
   p_text = ""+row["aprose"]+"""
   # breaks
   # concatenate html
   row_html = p_rank + p_title + p_paper_date + p_id + p_text + p_break
   #print(row html)
   return row_html
```

In [113]:

```
# convert the cdf articles to a "user-friendly" html file

def df_to_html(cdf,year,factor_list,cnick):

    factor_list_str = [str(factor) for factor in factor_list]

    fname = str(year)+"_"+cnick+"___"+"_".join(factor_list_str)+".html"
    fpath = "../data/"

    f = open(fpath+fname,'w',encoding="utf-8")

    for row in cdf.iterrows():
        f.write(row_to_html(row))
```

1994 components

1994 Bi-partisan dyad

- · 416 politics of N/S unification
- · 1024 increase in defectors in Korean society

In [114]:

```
# construct cdf (component dataframe) and export
cdf = extract_articles(1994,[416,1024])
df_to_html(cdf,1994,[416,1024],"bipartisan dyad")
```

1994 Progressive linkages to dyad (416,1024,[35,1130,1098]) - analyze as a clique

- #1 35 N & S strategic posturing
- #2 1130 NK nuclear issue & 6 party talks
- #3 1098 Perry process: Yongbyon, IAEA, LWR

In [115]:

```
# analyze all three linkages as a clique
cdf = extract_articles(1994,[416,1024,35,1130,1098])
df_to_html(cdf,1994,[416,1024,35,1130,1098],"progressive clique")
```

2002 - 2005 components

2002 Bi-partisan dyad

- 416 politics of N/S unification
- 1024 increase in defectors in Korean society

In [116]:

```
cdf = extract_articles(2002,[416,1024])
df_to_html(cdf,2002,[416,1024],"bipartisan dyad")
```

2003 Conservative triad

- 416 politics of N/S unification
- 1024 increase in defectors in Korean society
- · 879 legacy of the democratization movement

In [117]:

```
cdf = extract_articles(2003,[416,1024,879])
df_to_html(cdf,2003,[416,1024,879],"conservative triad")
```

2004 Conservative clique

- 416 politics of N/S unification
- · 1024 increase in defectors in Korean society
- 1130 NK nuclear issue and 6 party talks
- 35 N & S strategic posturing

2004 Conservative linkages to the clique - treat as clique

- #1 879 legacy of the democratization movement
- #2 218 strong response to NK security crisis

In [144]:

```
cdf = extract_articles(2004,[416,1024,1130,35])
df_to_html(cdf,2004,[416,1024,1130,35],"conservative clique")

cdf = extract_articles(2004,[416,1024,1130,879])
df_to_html(cdf,2004,[416,1024,1130,35,879],"conservative link 1 to clique")

cdf = extract_articles(2004,[416,1024,1130,35,218])
df_to_html(cdf,2004,[416,1024,1130,35,218],"conservative link 2 to clique")
```

2005 Bi-partisan clique

- · 416 politics of N/S unification
- 1024 increase in defectors in Korean society
- 1130 NK nuclear issue & 6 party talks
- · 35 N & S strategic posturing
- 1098 Perry process: Yongbyon, IAEA, LWR
- 1328 6-Party Talks: negotiation: Kelly, Hill, Bush, State Dep

In [125]:

```
cdf = extract_articles(2005,[416,1024,1130,35,1098,1328])
df_to_html(cdf,2005,[416,1024,1130,35,1098,1328],"bipartisan clique")
```

2005 Conservative linkages to the clique

- #1 879 legacy of the democratization movement
- #2 244 real change, improvement, advancement, international community
- #3 264 voting in the UN and EU
- #4 1218 strong response to NK security crisis

In [129]:

```
cdf = extract_articles(2005,[416,1024,1130,35,1098,1328,879])
df_to_html(cdf,2005,[416,1024,1130,35,1098,1328,879],"conservative link 1 to clique")

cdf = extract_articles(2005,[416,1024,1130,35,1098,1328,244])
df_to_html(cdf,2005,[416,1024,1130,35,1098,1328,244],"conservative link 2 to clique")

cdf = extract_articles(2005,[416,1024,1130,35,1098,1328,264])
df_to_html(cdf,2005,[416,1024,1130,35,1098,1328,264],"conservative link 3 to clique")

cdf = extract_articles(2005,[416,1024,1130,35,1098,1328,1218])
df_to_html(cdf,2005,[416,1024,1130,35,1098,1328,1218],"conservative link 4 to clique")
```

2005 Progressive linkages to the clique

- #1 1417 bilateral US-ROK relationship
- #2 746 economic sanctions for nuclear experiments, UN Security Council

In [130]:

```
cdf = extract_articles(2005,[416,1024,1130,35,1098,1328,1417])
df_to_html(cdf,2005,[416,1024,1130,35,1098,1328,1417],"progressive link 1 to clique")

cdf = extract_articles(2005,[416,1024,1130,35,1098,1328,746])
df_to_html(cdf,2005,[416,1024,1130,35,1098,1328,746],"progressive link 2 to clique")
```

2014 - 2016 components

2014 Progressive clique

- · 416 politics of N/S unification
- 1024 increase in defectors in Korean society
- 35 N & S strategic posturing
- 271 ICC, COI: criminal, report, violation, extradition
- · 1093 ICC, UN: criminal courts, adopt resolution
- 1130 NK nuclear issue & 6 party talks
- 746 economic sanctions for nuclear experiments, UN Security Council

In [132]:

```
cdf = extract_articles(2014,[416,1024,35,271,1093,1130,746])
df_to_html(cdf,2014,[416,1024,35,271,1093,1130,746],"progressive clique")
```

2014 Progressive dyad #1 linked to clique

- 1417 bilateral US-ROK relationship
- 383 Korea-America alliance: FTA, ratification, mutual assistance

```
In [133]:
```

```
cdf = extract_articles(2014,[416,1024,35,271,1093,1130,746,1417,383])
df_to_html(cdf,2014,[416,1024,35,271,1093,1130,746,1417,383],"progressive link 1 to clique"
```

2014 Progressive dyad #2 linked to clique

- 308 legislative conflict over passing a bill
- · 295 bill, right to life: Saenuri, NDAP, Shim Jae-kwon

In [134]:

```
cdf = extract_articles(2014,[416,1024,35,271,1093,1130,746,308,295])
df_to_html(cdf,2014,[416,1024,35,271,1093,1130,746,308,295],"progressive link 2 to clique")
```

2014 Conservative triad linked to clique

- · 1024 increase in defectors in Korean society
- 271 ICC, COI: criminal, report, violation, extradition
- 1093 ICC, UN: criminal courts, adopt resolution

In [145]:

```
cdf = extract_articles(2014,[416,1024,35,271,1093,1130,746,1024,271,1093])
df_to_html(cdf,2014,[416,1024,35,271,1093,1130,746,1024,271,1093],"conservative link to cli
```

2015 Bi-partisan triad

- 416 politics of N/S unification
- 1024 increase in defectors in Korean society
- 1218 Park's strong response to NK security crisis

In [146]:

```
cdf = extract_articles(2015,[416,1024,1218])
df_to_html(cdf,2015,[416,1024,1218],"bipartisan triad")
```

2015 Bi-partisan dyad

- 416 politics of N/S unification
- 308 legislative conflict over passing a bill

In [147]:

```
cdf = extract_articles(2015,[416,308])
df_to_html(cdf,2015,[416,308],"bipartisan dyad")
```

2015 Conservative clique

- 416 politics of N/S unification
- 308 legislative conflict over passing a bill
- 572 domestic electoral & legislative politics
- 794 one-shot law, human rights act (SK), National Assembly procedure

In [135]:

```
cdf = extract_articles(2015,[416,308,572,794])
df_to_html(cdf,2015,[416,308,572,794],"conservative clique")
```

2015 Conservative link to clique

· 295 bill, right to life: Saenuri, NDAP, Shim Jae-kwon

In [136]:

```
cdf = extract_articles(2015,[416,308,572,794,295])
df_to_html(cdf,2015,[416,308,572,794,295],"conservative link to clique")
```

2015 Progressive clique

- · 416 politics of N/S unification
- 1130 NK nuclear issue & 6 party talks
- 746 economic sanctions for nuclear experiments, UN Security Council
- 924 NK security: violations, denuclearization, ballistic missile launches, provocation

In [137]:

```
cdf = extract_articles(2015,[416,1130,746,924])
df_to_html(cdf,2015,[416,1130,746,924],"progressive clique")
```

2015 Progressive linkages (each separately linked to progressive clique)

- 1417 bilateral US-ROK relationship
- 35 N & S strategic posturing
- 383 Korea-America alliance: FTA, ratification, mutual assistance
- · 244 real change, improvement, advancement, international community

In [138]:

```
cdf = extract_articles(2015,[416,1130,746,924,1417])
df_to_html(cdf,2015,[416,1130,746,924,1417],"progressive link 1 to clique")

cdf = extract_articles(2015,[416,1130,746,924,35])
df_to_html(cdf,2015,[416,1130,746,924,35],"progressive link 2 to clique")

cdf = extract_articles(2015,[416,1130,746,924,383])
df_to_html(cdf,2015,[416,1130,746,924,383],"progressive link 3 to clique")

cdf = extract_articles(2015,[416,1130,746,924,244])
df_to_html(cdf,2015,[416,1130,746,924,244],"progressive link 4 to clique")
```

2016 Bi-partisan triad

- 35 N & S strategic posturing
- 1218 strong response to NK security crisis
- 794 one-shot law, human rights act (SK), National Assembly procedure

In [139]:

```
cdf = extract_articles(2016,[35,1218,794])
df_to_html(cdf,2016,[35,1218,794],"bipartisan triad")
```

2016 Conservative clique

- 572 domestic electoral & legislative politics
- 416 politics of N/S unification
- 794 one-shot law, human rights act (SK), National Assembly procedure
- 308 legislative conflict over passing a bill
- 1024 increase in defectors in Korean society
- 35 N & S strategic posturing

In [140]:

```
cdf = extract_articles(2016,[572,416,794,308,1024,35])
df_to_html(cdf,2016,[572,416,794,308,1024,35],"conservative clique")
```

2016 Progressive triad #1

- 416 politics of N/S unification
- 1218 strong response to NK security crisis
- 746 economic sanctions for nuclear experiments, UN Security Council

In [141]:

```
cdf = extract_articles(2016,[416,1218,746])
df_to_html(cdf,2016,[416,1218,746],"progressive triad 1")
```

2016 Progressive triad #2

- 416 politics of N/S unification
- 746 economic sanctions for nuclear experiments, UN Security Council
- 924 NK security: violations, denuclearization, ballistic missile launches, provocation

In [143]:

```
cdf = extract_articles(2016,[416,746,924])
df_to_html(cdf,2016,[416,746,924],"progressive triad 2")
```

In []:		