Visualizing RGB Channels

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1 RGB colorspace

1.0.1 Import resources

```
In [1]: import matplotlib.pyplot as plt
        import matplotlib.image as mpimg

        %matplotlib inline
```

1.0.2 Read in an image

```
In [2]: # Read in the image
        image = mpimg.imread('images/wa_state_highway.jpg')

        plt.imshow(image)
```

```
Out[2]: <matplotlib.image.AxesImage at 0x7f776a7caa90>
```

1.0.3 RGB channels

Visualize the levels of each color channel. Pay close attention to the traffic signs!

In [3]:
```
# Isolate RGB channels
r = image[:,:,0]
g = image[:,:,1]
b = image[:,:,2]

# Visualize the individual color channels
f, (ax1, ax2, ax3) = plt.subplots(1, 3, figsize=(20,10))
ax1.set_title('R channel')
ax1.imshow(r, cmap='gray')
ax2.set_title('G channel')
ax2.imshow(g, cmap='gray')
ax3.set_title('B channel')
ax3.imshow(b, cmap='gray')

## Which area has the lowest value for red? What about for blue?
```

Out[3]: <matplotlib.image.AxesImage at 0x7f776655af28>